MAY 6 1927
Hospital Library
MAY 10 1927



The MODERN HOSPITAL

Vol. XXVIII May, 1927 No. 5

Copyright, 1927, by THE MODERN HOSPITAL PUBLISHING CO., Inc.
Published monthly at 22-24 E. Ontario Street, Chicago., Ill., by The Modern Hospital Publishing Co., Inc.
Entered as second-class matter October 1, 1918, at the Post Office at Chicago. Ill., under the act of March 3, 1879.
Subscription—United States, $3.00; Canada, $3.50; Foreign, $4.00.

The New and Better Way

WE all know now, on the word of the greatest scientific authorities, that food sterilized in sealed cans is as safe as food can be. We know the can does no damage to the food. We know the sterilization does not harm it. We know that milk sterilized in sealed cans, is just one of the modern accomplishments through which science has given us safer, better foods.

What is it? Evaporated Milk is pure, fresh milk in air-tight containers. Nothing is added to preserve it. Not a thing is taken from it but some of the water which is the greater part of all milk. All the food qualities of the milk are kept in it. None of them is harmed in any way.

Fresh, sweet, and absolutely clean. The milk is produced under the supervision of experts on farms in the best dairying sections of America. It is received in sanitary plants in the country within a few hours after it comes from the cow—while it is fresh and sweet. It is carefully tested for purity and cleanliness. Then part of the water is removed—it is concentrated. Finally, it is put in air-tight containers and sterilized—protected from everything that can impair its freshness and sweetness and purity.

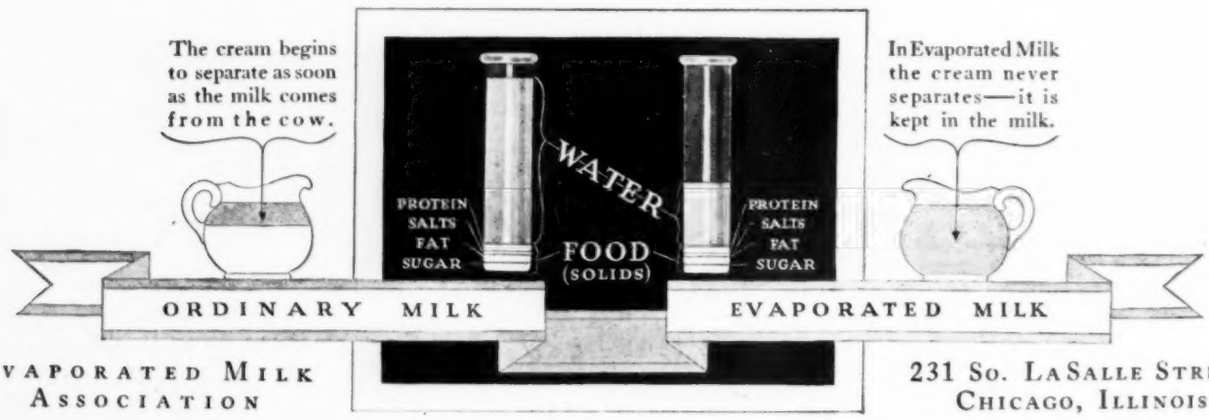
With better richness. 87½% of natural cows' milk is water. The remaining 12½% is composed of butter-fat (cream), milk sugar, proteins and mineral salts. 60% of the water of natural milk is removed in making Evaporated Milk. The food (solid) content of Evaporated Milk is, therefore, more than twice as great as in ordinary milk. And *every drop* of Evaporated Milk contains *all* the food elements of milk. There is no cream line. The cream never separates. It stays in the milk. Evaporated Milk is *never* skimmed milk. It is always more-than-double rich in butter-fat and *also* in the bone and tissue-building substances—in all the elements which make milk nature's most perfect food.

For every use. Wherever you need milk, Evaporated Milk will *better* fill the need. In cream soups, for creaming vegetables, in breads and cakes, in cocoa, iced or hot—wherever you use milk—Evaporated Milk serves as nothing else will serve.

Evaporated Milk serves in place of cream for coffee, in ice creams, for desserts—wherever you need cream (single or double). The adaptability of Evaporated Milk to every milk and cream use will be an astonishing revelation that will surprise you and delight you.

The modern cream and milk supply. Undiluted Evaporated Milk serves as cream—at less than half the cost of cream. It can be diluted to suit any milk need, and costs less than ordinary milk.

Let us send you our free booklets telling you more about the good qualities and varied uses of Evaporated Milk.



EVAPORATED MILK ASSOCIATION

231 So. LASALLE STREET
CHICAGO, ILLINOIS

THE MODERN HOSPITAL

A Monthly Journal Devoted to the Building, Equipment and Administration of Hospitals, Sanatoriums and Allied Institutions, and to Their Medical, Surgical and Nursing Services

Vol. XXVIII *May 1927* No. 5

IS THE HOSPITAL ADMINISTRATOR FULFILLING HIS RESPONSIBILITIES TOWARD HIS NURSES?

By Shirley C. Titus, Director of Nursing, University Hospital,
Ann Arbor, Mich.

FEW are the hospital administrators and hospital boards who have not spent many anxious hours during the past few years trying to devise some plan by which the ever mounting cost of nursing could be reduced to the patient; some plan by which students would be attracted into their hospital schools; some scheme by which students could be induced to remain and render the greatest possible service to the hospital at the least possible cost to that institution.

The hospital has been situated, so to speak, "between the devil and the deep sea," and it will continue to remain so until the hospital authorities and the public at large awaken to the fact that the education of the nurse must be provided for in precisely the same manner as other branches of education, namely, by general taxation, instead of attempting to continue the present unsound system of compelling the sick patient to support an educational program concerning which he knows nothing and to which he is contributing without his knowledge.

If the hospital is to attract students into its school, and keep them there, it is compelled to provide a sound educational program. Such a program is costly. Well prepared instructors, classrooms, laboratories, libraries, equipment of various types and varieties, all of these run up into money. A nursing school grows more expensive to maintain as the years go on and there seems to be no possibility of reducing this expense in the future. The only alternative the hospital has, therefore, is to change over to a full graduate nurse staff. Whether a school of nursing is maintained, or whether a full graduate nurse staff takes its place, the hospital finds itself unable to reduce the price of nursing to the patient who is already complaining over the exorbitant hospital prices. The hospital administrator and his board have, therefore, a real and pressing problem to solve in relation to the nursing service.

In the light of such conditions it is indeed surprising that the average hospital administrator has not taken a greater interest in the problem of the health of the student nurse. If considered from no other angle than its economic aspect it is a problem worthy of his consideration. While without question, the economic aspect of the health of the student nurse will more quickly attract his interest and attention, the hospital director must see that the problem has other angles toward which he and the entire hospital have a distinct responsibility, a responsibility concerning which at the present time they are perhaps entirely ignorant or indifferent.

Let us first consider the problem of the health of the student nurse purely from its economic viewpoint. Industry has long since discovered that the health of its workers has a direct relationship to the efficiency of the plant. It has learned that a worker may be on the job and may appear, from casual observation, to be enjoying good health but upon further examination and analysis may be found to be far from that state. Industry has found, likewise, that every time a man is laid off temporarily, or permanently, it

costs the plant money. Dr. Caroline Hedger in one of her excellent addresses on the health of student nurses draws our attention to the fact that the Commonwealth Steel Company of Illinois, which has made an unusually careful study of the cost of hiring and firing a man, finds that it costs them some eighty-five dollars every time a man is hired and fired. It would seem that if industry has so fully come to recognize the important relationship between the health of its workers and plant efficiency and cost, and if it is attempting in every way to reduce turnover from ill health, that the hospital, which is in fact a business, should draw upon the experience and results of industry's study.

Superintendents Are Not Informed

Even with the cost of nursing service becoming a veritable nightmare, as it has, to the hospital administrator and to those responsible for the financial management of the hospital, few are the hospital directors who could answer many questions put to them about the health conditions of the student in the nursing school. Could they tell you what is the average total days' illness per year for the student body this year, last year and the year before? Could they tell you whether the sick record was improving or not? Could they give you an analysis of causes of this illness? Could they tell you whether this illness was scattered throughout the entire body or concentrated in a few sickly students? Could they tell you how soon after reporting the illness the student received full and adequate care? Could they tell you anything about how the convalescent nurse was looked after?

These are only a few of the questions that might be put to the hospital director but the answers to them would be sufficient to show that the average man holding this position knows little or nothing about this highly important subject. Surely if industry has found the health of its workers a problem worthy of investigation and careful study, the able hospital administrator should find in the health conditions of the student nurse a problem of moment enough to excite some interest and study. It would appear that anything that would reduce to some degree the cost of nursing service to the patient, that would improve the efficiency of the nursing service, is worthy of consideration.

Another important reason why the health program of the nursing school should receive due interest and proper attention from the hospital authorities—although this reason will not be so clearly recognized or considered as important as the economic reason—is the fact that if the hospital is really to function as a "health center to the community" it must graduate nurses who are not only enjoying good health but nurses who are thoroughly imbued with the "positive health" ideal and who will live health, and teach health by precept and example.

All too often the hospital, absorbed as it is in the near goal—the nursing of the patients within its doors by students who will remain with them three years—forgets its responsibility to the far goal—the preparation of graduate nurses who are to meet the varying demands of the community for years to come. The hospitals of this country must, if they are to discharge their duties to the community as they should, think as often of the service the potential graduate is to give the community as of what the hospital is to gain from her three years of service.

Viewed from this standpoint, it is not difficult to see that not only must the hospital recognize that each of its students should receive a well rounded experience in the five major clinical services—surgery, medicine, obstetrics, pediatrics and mental and nervous disorders, and a proper and adequate background of theoretical instruction, but also that it must bring its students to the point where they not only enjoy the maximum health possible for them, but are thoroughly cognizant of the meaning of positive health, and will live it and teach it upon graduation.

Nurses Must Teach Health

Prevention of disease has for some years past been recognized as being even more important than the cure of disease. Perhaps the greatest rôle that the modern nurse has to play is that of health educator to the community. She therefore must not only know the principles of hygienic living but must actually follow them herself. Teaching by precept and example is the most effectual teaching that can be found. No nurse can teach health to the community unless she is the embodiment of health herself. While it is ridiculous to suppose that every nurse shall represent a picture of one hundred per cent positive health, nevertheless, the average nurse should be taught how to possess maximum health and how to live in accordance to the laws of hygiene.

Let us now consider some of the essential or salient features that must be regarded in establishing a real health program in a school of nursing. For the sake of convenience we shall discuss, first, the health of the freshman nurse; second, the health of the older student and the acutely ill student; and third, the graduate nurse and positive health.

Practically every nursing school asks the incoming student to present a statement from her

family physician regarding her physical fitness for entering nursing. The nursing school should carefully draw up a form for the family physician to fill out rather than accept a "blanket statement" from him. A "blanket statement" is usually hardly worth the paper it is written on, as often the physician thinks it unnecessary to examine carefully a young and apparently healthy girl and "passes her up" upon his casual observation of her. On the other hand, unless he is forced to answer direct and clear-cut questions regarding the applicant, he may not feel free to give such a statement as will possibly jeopardize the girl's chances of entering nursing although he really knows she has an organic or functional disturbance of some kind. The family physician has to live and work in a certain community and one cannot condemn him too severely for trying to avoid unpleasant feeling, especially on the part of some influential family in the community.

The following is a form worked out by one school of nursing that has become deeply interested in the health problem of its students:

Name of applicant .....
Height .....Weight .....Race .....
What serious illness has candidate had?
Has she had (kindly state age when she had disease):

Whooping cough	Mumps
Measles	Scarlet fever
Chicken pox	

Is she subject to:

Earaches	Headaches
Digestive disorders	Throat disorders
Hay fever	

Is her menstrual function regular and normal?
Has she had any ovarian or uterine disorders?
Heart examination shows?
Chest examination shows?
Is her hearing normal?
Is her sight normal?
Has she any unusual scars or abnormalities?
Has she ever had convulsions of any kind?
Sp G.? Albumin? Sugar?
Is there any enlargement of the thyroid?
What is pulse rate if thyroid is enlarged?
Has she ever been treated for disturbance of the thyroid?
Is her skin soft, clear, and free from eruptions?
What is her family history in regard to:
Tuberculosis; epilepsy; mental diseases.
Have you carefully examined the applicant?
Do you recommend her admission to the school?

Signature
Residence

Date

Too great care cannot be taken in preparing the health form and checking it when it is presented. Even with this safeguard it is well to have a personal interview with the applicant if this is at all possible.

Within the first month, at the latest, after the student has entered the school, the hospital physicians should give her a careful physical examination. Her eyes, ears, nose and feet should be examined by specialists, if possible. She should be scored for posture, nutrition and mental alertness. A basal metabolism, electrocardiogram, x-ray and every other special facility should be used to check up on her if there seems to be the slightest indication that there is a disturbance of any kind. A psychometric test should be given every freshman.

The aid of the dietitian should be solicited for the "overweights" and "underweights" and weight charts should be started on them at once.

Why Immunization Is Necessary?

The question of immunization of the freshmen presents a real problem and is a controversial matter. There certainly can be no question about immunizing the student as far as it seems wise to do so, but just how much immunization shall be done, and when, is a matter of discussion. Some schools start a perfect campaign of immunization upon their freshmen the moment they enter. That such a campaign has a bad psychological effect upon a young person already under considerable nervous strain in adjusting herself to a totally new environment cannot be denied. It is during the preliminary period, also, that the student is expected to carry the hardest and heaviest schedule of studies and it hardly seems fair to keep her below par physically by a series of inoculations at this particular time.

It has been suggested that vaccination against small-pox should be done before the student's entrance to the school. The school authorities can check up on this vaccination fairly easily and if there is any doubt as to the manner of vaccination or its success, re-vaccination could be instituted.

The Schick test and its complement, toxin-antitoxin, certainly should be administered as soon after the student enters the school as possible. Vaccination against typhoid, it seems, should be done only if there are actually typhoid cases within the hospital, or in the community where the hospital is located or where the girl herself lives.

There has been much discussion as to whether a Wassermann should be taken on every incoming student or not. While there are, of course, many arguments for taking this precaution, nevertheless they are hardly convincing unless the hospital is demanding a Wassermann on all its employees—

interns, all nurses, dietitians, orderlies, ward helpers, cooks, porters, maids. If such is the hospital policy, the Wassermann could be taken at a time when the student is not just recovering from the nervous strain and physical discomfort caused by various inoculations.

Course in Personal Hygiene

One of the most important features in establishing a proper health program for the school is the course in personal hygiene, which should be given immediately the semester's work begins. If possible it is well to make this course a symposium, having the dietitian give the talks on nutrition and diet, and the physical education instructor (perhaps borrowed from a nearby institution) the talks on exercise and muscle development. The major part of the course should be given by the nurse whose function it is to look after sick student nurses (the welfare nurse or however she may be designated). It seems that the only really effectual way to teach personal hygiene is to score the student not alone on her ability to pass an examination in the course but on her actual manner of living hygienically. A few schools are rating the student in this course half on her ability to recite and on the examination she writes, and half on her health habits. A merit and demerit system should be set up to rate her on her ability to live health. For example, if she takes a daily hike she will receive so many merit points; if she sleeps with her window closed, she is given so many demerit points; if she runs back and forth to the hospital without rubbers or proper outer wraps she receives a certain number of demerit points. The "overweights" and the "underweights" receive or lose points according to their interest and effort in reaching normal weight.

It is, of course, impossible to set up any absolutely correct method of rating students on their ability to live health, but the merit-demerit system certainly draws their attention sharply to their responsibility for their health. It does, in fact, help them to build a "health consciousness" which, after all, is the primary objective of this course.

The success or failure of such a system depends largely upon having one graduate set aside whose major function it will be to follow-up the welfare and health of the student body. It is not enough to have merely assigned such a nurse to this service; this nurse must be one who sees the importance of her task and who will bring to it a wealth of enthusiasm and interest. Needless to say, she must be a healthy individual herself.

The welfare nurse must check up on the health of the older students as well as the freshmen and she must be eternally vigilant and watchful. Every hospital, without exception, should have a complete physical examination done on its students at least once a year. The welfare nurse should see that such an examination is done at the proper time regardless of how well the student may appear. It is amazing what startling facts a periodic examination on a large group brings to light—heart lesions, suspicious chests, thyroid conditions.

The same attention to weight should be given the older students as is given to the freshmen.

One school, in order to keep the attention of the older students attracted to health, posts a monthly report of the sick record of each class. There is much laughter and joking directed toward the members of the "puny class" and soon every student is busy trying to prevent a high sick record in her class.

In speaking of the health of the students it is necessary to say a few words regarding the wisdom, or lack of wisdom, of allowing a specific number of days each year for illness. While on the surface it may appear that the school is doing the correct thing in allowing so many days credit each year for sickness, there are some people who feel that this is really putting a premium on sickness and think it more advisable to allot this week, or two weeks, to a longer vacation period. A month's vacation at least at the end of the first and second year's work is none too much, and the sick allotment time would do much to make this possible. It is also true that the conscientious student does not always profit as greatly from the sick allotment time as does the less conscientious student. There are, of course, arguments for and against such a system and the individual school must decide which system appears to be most desirable for its needs.

Illness Should Be Promptly Reported

In regard to the care of the sick student there are four major points to be considered, namely: The matter of a prompt reporting of illness; immediate and adequate medical and nursing care for her; proper period of hospitalization; a carefully managed convalescent period.

It is essential, if the sick nurse is to receive proper care, that certain specific hours shall be designated when she may report to the office for care (naturally, it is understood emergency care is to be given at any hour). At these hours the welfare nurse must be in the office to receive the sick nurse. It is highly desirable, if possible, to have a physician either present or at least immediately available. Such a system prevents the student from making excuses for a tardy reporting of her illness and also does away with the bad psychological effect of making the student feel that

she is just an additional piece of work to an overworked staff.

Even under these favorable conditions there will be a few students who will only report in after several hours of a tonsillitis or other illness. Education alone can prevent such negligence.

While hospitalization is expensive unless there is an infirmary with a twenty-four hour nursing service established, any student too ill to be ambulatory should be immediately sent into the hospital. The casual, haphazard medical and nursing care and the cold meals too often given to the nurse who is ill in the nurses' dormitory is thoroughly contra-indicated in a well rounded health program for student nurses. While it costs more, perhaps, on the surface to hospitalize the student, there is no question but that she is returned to duty earlier and has a more complete recovery than she does if allowed to remain in the nurses' dormitory.

Regulate Visits Paid to Sick Nurse

Another point to be considered in relation to the sick nurse in the dormitory is the number of visitors she has. From the friend who is really desirous of rendering her care, to the student who "just-dropped-in-to-see-how-you-are, Dear!", the sick nurse is subjected to too much visiting. If she is ill from what later becomes a communicable disease, the contacts are fraught with danger. No strict rule of the nursing office will prevent such visiting; removal from the dormitory alone will solve the problem.

One of the great needs in any nursing school is to have a paid physician for the school. He may, of course, call in any number of men in consultation but the care of sick nurses will always be distinctly poor and entirely inadequate until one physician is given as his major function the care of the sick nurses. The physician who is called upon to see this nurse or that nurse, and this at long intervals, may give her proper medical care for the moment but he sees only one small fragment of the whole problem. He is, perhaps, entirely ignorant of the health program of the school; he is, as a rule, inclined to be entirely too sentimental about the "poor nurse," and to be too suspicious of what he considers to be an ogre, hard-hearted and inhuman to the "poor little nurses"—the department of nursing office. It is only after following-up student nurses over a period of time and becoming thoroughly conversant with the problems of the department of nursing office, as well as its health program, that the physician handling student nurses can really contribute to the solution of this problem anything worth while.

For example, the period of hospitalization and the convalescent period of the sick nurse must be carefully handled. To discharge a nurse too soon from the hospital is as bad as to hospitalize her too long. As soon as she is convalescent she should be discharged either to her own home or, if that is not possible, to the nurses' dormitory. She should be given direct instruction as to how she is to live during this period. Limitations on social activities should be set up, proper rest during the day indicated to her, proper exercise and diet prescribed. All too often the physician in charge of the case forgets he is handling an adolescent girl, not a mature woman. He feels she should know this or that, but the fact of the matter is, she doesn't apply such knowledge as she has to herself. He has, therefore, a definite responsibility not only to the hospital but to the girl herself and her family, in directing her how best to live and what rules to observe when recovering from an illness.

There should be certain definite regulations in the nurses' dormitory for convalescent nurses. All convalescent nurses, also, should be followed-up by the welfare nurse each day. The welfare nurse should confer with them about how they are feeling, what they did the day before and what they may do today.

Investigate Cause of Illness

No case of illness should be treated without the physician making careful inquiry into conditions leading up to this illness. The student suffering too frequently from either major or minor illnesses should be closely catechized regarding these indispositions. She should be made to feel, also, that she is just as responsible as the physician and the hospital for bringing herself back to that state of health where she has normal immunity to disease.

If the health program of the nursing school properly performs its function, every student when graduating should be a person simply radiating health and energy. She should thoroughly understand the laws of health and actually attempt to live according to them. She should have a definite "health consciousness" and be convinced that no citizen is a good citizen unless he enjoys the maximum degree of health that he, as an individual, can enjoy. She must realize the rôle that she, as a health educator, has in bringing about such conditions.

It is to be hoped that every hospital board and administrator will see the tremendous worthwhileness of such a program. Economically they cannot afford to remain blind to its possibilities; ethically they must respond.

HARTFORD HOSPITAL HAS SEPARATE X-RAY BUILDING

By Carl J. Malmfeldt, Architect,
Hartford, Conn.

THE importance to a hospital of having a separate building for all x-ray, radium, deep therapy, cystoscopic and photographic work can hardly be overestimated, particularly so when such a building can be centrally located.

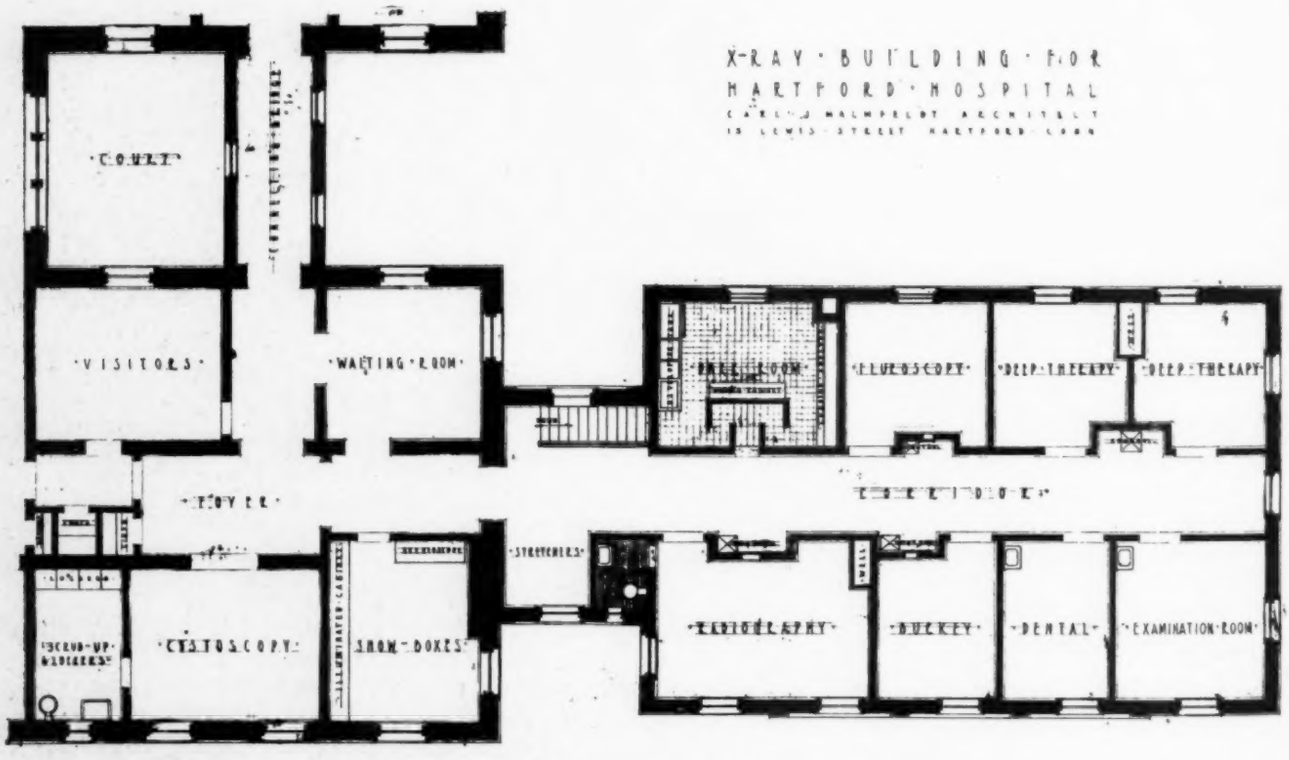
The Hartford Hospital, Hartford, Conn., is very fortunate, first in having such a location and second in being presented with the Capewell Memorial X-Ray Building. This building harmonizes with the other hospital buildings, being constructed of Connecticut brownstone, and is fireproof throughout. All portions of the building that are subjected to high voltage currents are properly insulated with lead, lead glass, and barium plaster on the ceilings and walls.

The top floor of this building is on the same level as the administration and main floor of the hospital. Because it is necessary to have the developing and fluoroscopic rooms dark, hospitals too often put their x-ray departments in some dark, unused, out-of-the-way corner in the basement. The location of so important a department deserves a better fate and with the advancement that is being made in x-ray work and hospital construction it is safe to predict that the x-ray departments of the future will be placed in a convenient, well lighted and well ventilated location. This is especially desirable for the deep therapy department where the treatments last from sixty to ninety minutes each and usually extend over a period of four or five days.

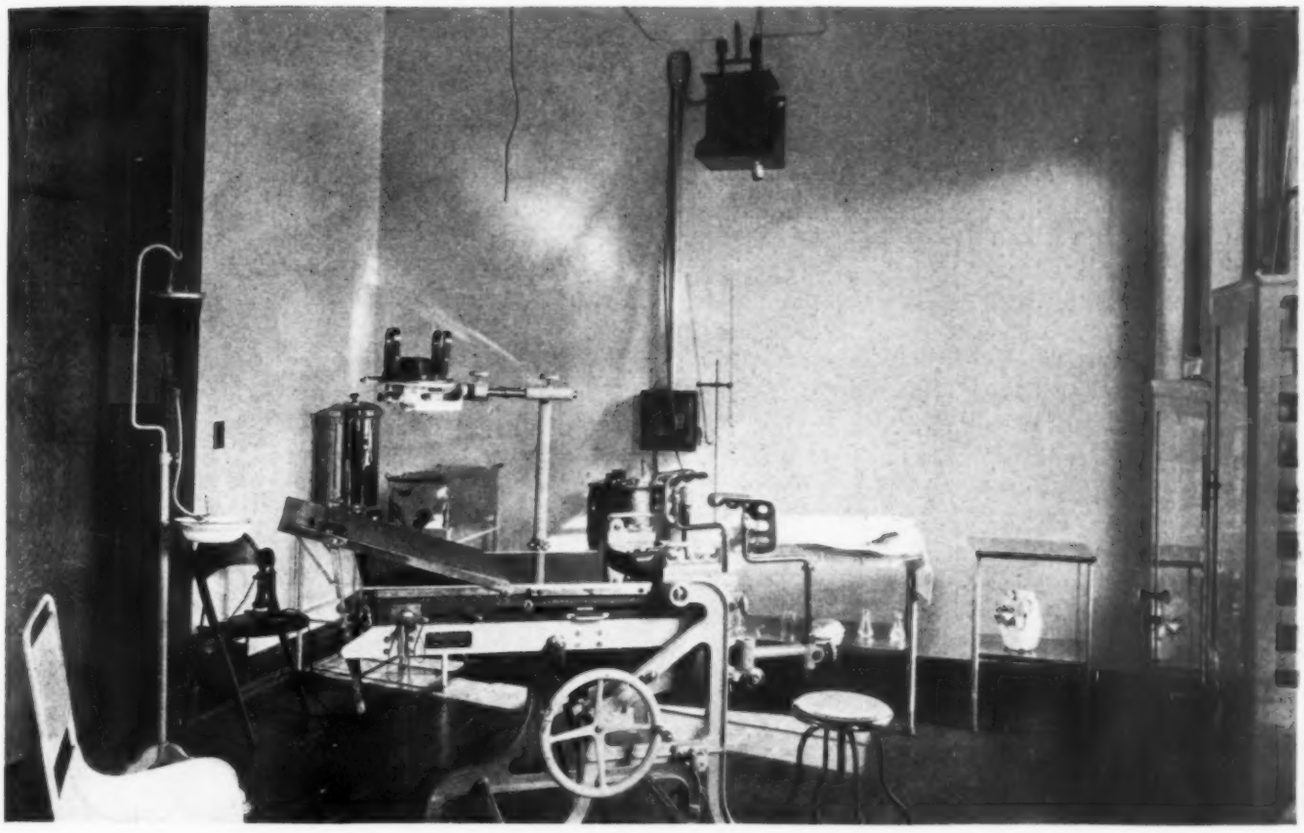
On the first or ground floor of this building are located all of the machinery, transformers and film storage, as well as the photographic department. The transformers were so placed for two reasons: first, to create additional space on the main floor, second, to eliminate all noise on the main floor, the leads being brought up through a conduit and distributed by a system of aerials to the various units. The film storage is fireproof and is vented in accordance with the specifications of the fire underwriters.

The main floor contains 3,875 square feet of floor space, a plan of which is submitted herewith.

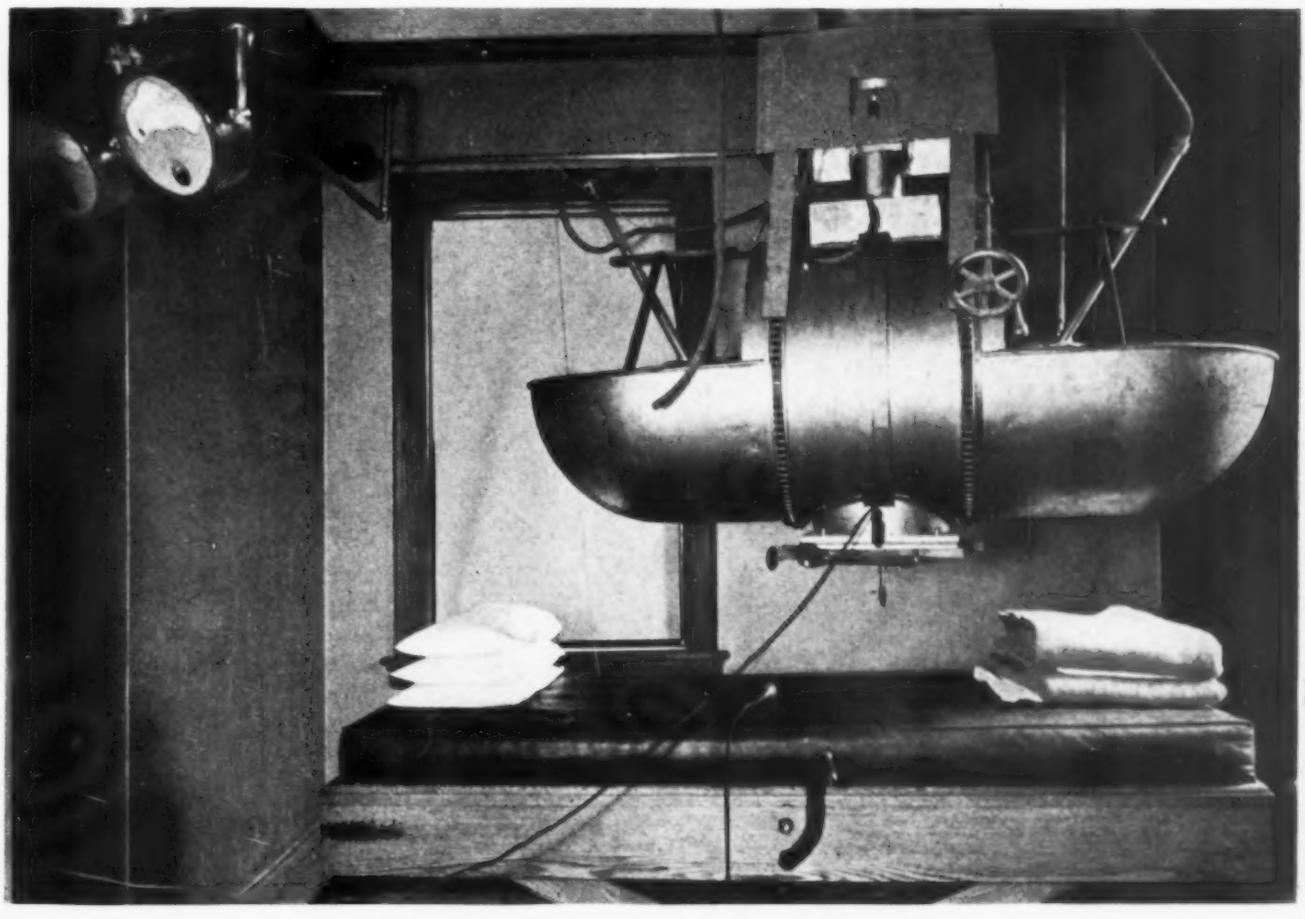
Since this article is meant to deal briefly with



FIRST FLOOR PLAN



One of the cystoscopic rooms, Capewell Memorial X-Ray Building.



One of the deep therapy treatment rooms, Capewell Memorial X-ray Building.

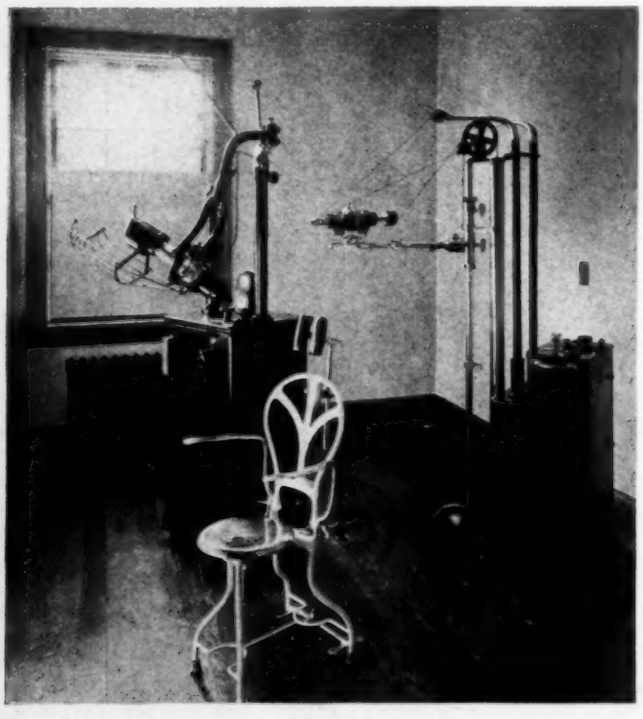
construction and arrangement, no attempt will be made to describe in detail the equipment and furnishings except in the deep therapy department, where protection from the high voltage rays for both patient and operator is provided by means of lead-lined drums. These drums are lead-lined receptacles suspended from the ceiling by steel girders, having gear tracks with swivel joints which makes the manipulation of the drums over any part of the patient an easy matter notwithstanding their immense size and their weight.



The Capewell Memorial X-Ray Building, Hartford Hospital.

Enclosed in the drums are the x-ray tubes, with only one small aperture which regulates the size of the beam of radiation, this being the only outlet for the treatment rays. The advantages offered by this type of protection are, first, adequate protection for both operator and patient; second, protection to the tube against sudden changes in temperature, air currents and dust; third, ease of application of these controlled rays to the patient and, fourth, the ease by which the dosage may be accurately determined at any time. To accomplish this the drum contains an ionization chamber in the direct path of the rays, which provide constant readings by galvanometers that are placed within easy view of the operator. The drum also contains a small electric fan which prevents the tube from getting overheated.

Prior to the introduction of drums for this purpose it was necessary to keep the patient covered for the entire time of the treatment with sheets of lead rubber which were heavy and difficult to handle. The drums, however, take the place of this heavy covering and at the same time protect the patient from the rays of the uninsulated high tension terminals and wires.



The dental and portable units.

CORRECT COLOR FOR OPERATING ROOM

The value of color in the operating room has been given additional recognition as the result of research work that has recently been conducted by Dr. Paluel J. Flagg, New York, and the shade that was found best for this purpose has been produced by a manufacturer.

In his efforts to obtain the color scheme that is best adapted to the operating room, Dr. Flagg established the fact that a peculiar bluish green shade is the scientifically correct complement to blood when exposed to air. This shade gives the required intensity of color in a room where subdued illumination is important to prevent glare, thereby protecting the eyes of the surgeon.

The new color, or shade, is to be called "eyerest green." Dr. Flagg advocates the use of deep eyerest green on the floor under the operating table and a shading to a lighter tone as the walls are approached, with the walls fading into a deep cream up to and including the ceiling. He also advocates that the table, gowns, toweling and draperies used should be of the deepest tint of this color.

Dr. Flagg's findings are the latest contribution to the study of a proper color scheme for the operating room that has been made by several physicians and surgeons both here and abroad.

WHAT ARE THE COMMUNITY'S RESPONSIBILITIES TOWARD ITS CONVALESCENTS?*

By E. H. Lewinski-Corwin, Ph.D., Director, Hospital Information and Service Bureau, United Hospital Fund of New York,
New York

IT IS EASY to dogmatize, particularly in the complex field of social relationships. The stupendous development of extra-medical cults and healing missions in this country has been ascribed to the concatenation of the mysticism underlying the mental or emotional lives of a large number of our population and to the commercialism of the time, also to the nonchalant attitude toward treatment on the part of the medical profession since it attained a scientific status.

When medicine was delivered from the realm of the empiric and conjectural by the post-Pasteurian accoucheurs and got into the swaddling clothes of science, it forgot the man in the patient and saw only the case. Like all tyros, the new scientific doctors of medicine entered into their work with zeal and enthusiasm, and the diagnosis became the exclusive fetish; they lost interest in long drawn-out treatment of the patient afflicted with a chronic malady, or the slowly recuperating convalescent.

The patient, however, continued to be utterly unscientific and concerned not so much about diagnosis as about relief from the distressing symptoms of ill health and invalidism. The result of these two oblique motive forces was the growth of quackery and charlatism.

This is only a partial and inadequate explanation of a tendency that took root from diverse causes, but the bare fact remains that whatever the cause might have been or was, we have not solved the problems of convalescence and chronic disability in a constructive community fashion.

Taking Stock of Bed Capacity

Egged on by dramatic events in the field of medical discovery, and by prevailing social conditions, private benevolence and municipal concern have given millions for the construction of hospitals for medical and surgical treatment of acute conditions. In some instances, state tenderness has been touched and millions have been forthcoming to supplement the stupendously growing costs of general hospitalization. Unaccompanied by any too much conscious community direction of thought and effort, hospital development has come to a point where, figuratively speaking, it seems desirable to pause for a moment in order to draw breath and look around.

Taking the country as a whole, we have enough hospital beds for acute conditions, perhaps more than enough if we may judge this by the extent of utilization of existing hospital facilities. The utilization of these hospitals was but 66 per cent of their available capacity in 1925. I had occasion not long ago to estimate that in New York City, if we utilized our hospitals throughout the year to 90 per cent of their capacity, which, I grant, is an undesirably high utilization, we should have added to our resources without practically any additional cost for maintenance, six and one-half times the capacity of Mount Sinai Hospital, which is the largest private hospital in the city.

More Provision Needed for Chronics

I fully realize and for fear of misunderstanding, I desire to say that what may be true of a given city or the country at large, may not be true of many individual communities. There is still need in many places for additional hospital facilities or for the replacement of obsolete and unsafe buildings by modern fire-resistive construction. Speaking, however, in general terms, our next move should be not toward further increases in hospitals for acute conditions, but toward provision for the care of the chronically sick and the convalescent. I am speaking of the two because they are in numerous instances closely interrelated, and there is hardly a convalescent home that does not have a perceptible number of chronic cases, much as they try to eliminate them. I shall limit myself, however, to a discussion of the problem of the convalescent, but as far as the chronic problem is concerned, I should like to record an expression of hope that before long the chronic problem may receive adequate consideration, particularly on the part of municipal authorities. It seems that private philanthropy is not attracted to make investments for this very real social need.

Aside from any other reason, there are important economic grounds for community investments in institutional convalescence. First of all, and this is the minor economic factor, there is the saving that accrues from the fact that the cost

*Address delivered before Pennsylvania Conference on Social Welfare, Philadelphia, February 12, 1927.

of caring for a patient in a convalescent home is but one-half and sometimes one-third of the cost of having him stay in the hospital, not saying anything about the environment of the countryside being more conducive to rapid recovery.

Furthermore, we must take cognizance of the fact that the modern tendency in hospitals is to reduce the average length of stay of patients. The average stay of the average patient in our hospitals now is about or even less than two weeks. This means that patients are turned out of the hospitals the moment they reach the convalescent stage, when many of them are hardly in a condition to resume normal life. On the basis of large war experience, Dr. Bryant reached the conclusion that the convalescent's recuperative period after acute illness should be as long as the period of the illness itself. It takes that length of time to get over not only the somatic shock but also the mental disturbance and anguish. The length of convalescence varies, of course, in each individual case. There is no hard and fast rule. Some conditions require a much longer convalescence than others, but for general orientation purposes about two weeks per case should be counted on.

Post-Hospital Treatment Is Effective

The second and the major economic consideration is the fact that with the effective limitation of immigration, we cannot afford to be as extravagant with human material as we have been hitherto. Life and health must be conserved with greater solicitude than has been the case in the past. More consideration must be given to the human repair shop. We cannot continue to be so wasteful of health and brawn as we have been. It has been demonstrated that a good deal of health restoration and economic rehabilitation can be achieved by proper post-hospital treatment in convalescent homes and well organized out-patient departments, equipped with adequate personnel and a therapeutic armamentarium.

It may be of interest to mention that in Germany the *Kranken-Kassen* are realizing the situation and are beginning to make provision for convalescent care, and to build convalescent homes. Formerly, and this still holds to a large degree, the sick funds would not pay for the period of convalescence. The result has been that the hospitals have been obliged to keep the patients for inordinately long periods of time. In some of the large municipal hospitals of Germany and Austria the average stay of the patient in the hospital was something like two months. In other words, the hospitals are keeping convalescent patients, whom they expect to do certain chores around the hospital, when they are able to be up and about. The sickness funds are likewise beginning to realize the value of preventive medicine and are devoting some of their surplus funds to public health work and education. They are impelled to do so in view of the fact that the state, as well as the municipalities, faced with the necessity of reduction of expenses, have curtailed appropriations for public health purposes as one of the activities that could be spared.

Considering the enormous amount of sickness and disability that results from industrial accidents and occupational diseases, it is imperative for us to insist that the provisions of our workmen's compensation laws should recognize convalescence as an indispensable part of the treatment of the injured and of the sick. Many a man, after a siege of illness, is anxious to return to work when he is refused compensation for the period of his convalescence.

Aside from workmen's compensation cases, there is a great field for usefulness on the part of social service departments of hospitals in arranging conditions so that patients on discharge from a hospital may get the benefits of convalescent care to complete the recovery and to prevent an early recurrence of the disease. In certain conditions, because of a general lack of adequate medical supervision in the convalescent homes, it may be more advantageous for the patients to attend the out-patient department and receive medical attention there, than to go to a convalescent home in the country.

It may here be pointed out that the demand for convalescent institutions is more elastic than in the case of hospitals, and, in considering the community needs for institutional convalescent care, the potential rather than the effective demand should be the guide. We are faced with this situation in New York City. We are fairly well provided with beds in convalescent institutions and although theoretically we are considerably below the requirements for adequate institutional facilities for convalescence, our average utilization of the available bed capacity is not over 75 per cent in the aggregate.

Homes Do Not Cooperate

There are many causes for this which should be remedied and will be remedied in time, as the standards of service improve to satisfy the medical profession, and as the administrative technique as well as the attitude of the convalescent homes toward their community responsibilities undergoes a change. It is granted that in many instances the homes are handicapped by lack of funds to do what they themselves recognize as

necessary. The fact, however, remains that at the present time many of those who are responsible for convalescent homes maintain a negative attitude toward the problem. They are full of "don'ts." They don't take patients with a disturbing cough, or patients requiring special diets, or patients who cannot make their own beds, or patients who require dressings, or persons who are "queer," irrespective of the needs of those who are recuperating from the pneumonia, empyemas, gastric ulcers, kidney disease, diabetes, surgical operations, orthopedic deformities, and the neuropsychiatric conditions. By this method of negative selection a large number of people who are greatly in need of convalescent care are being eliminated.

Our general hospitals are surgical to the extent of 60 per cent of the total number of patients. This fact alone would indicate the need of facilities where simple dressings could be made.

An important element in the situation is the fact that there has not been in New York City any coordinating agency that would keep informed all those concerned about existing vacancies. In a large city like New York, it is customary for the social workers of certain hospitals to specialize, as it were, in certain convalescent homes. When a patient needs convalescent care, they call up certain homes with whom they are in the habit of dealing to find out whether or not there is a vacancy. They cannot call all the sixty-eight homes that exist. In this way, you find certain homes overtaxed; others are greatly under-utilized; there is not an even distribution of the load. Here also personal preferences on the part of the patients must be considered as well as the reputation an institution enjoys.

Do Not Lose Time

Furthermore, there is a lack of synchronization between discharge of patients from the hospital and their admittance to the convalescent home. When a patient once leaves the hospital and goes to his own home, he is not apt to go to a convalescent institution after a week or ten days have elapsed, and he has become more or less adjusted to his own environment. The social workers are sometimes to blame for this. Many times the doctors are at fault in not letting the social service department know, at least approximately, the day on which the patient would be discharged. The routine of admission often acts as a deterrent. The homes, as a rule, require an examination of the patient by their own admitting physician to protect themselves against undesirable patients. This implies a visit to the admission office, and this is often a strain on the convalescing patient. In addition must be mentioned the seasonal variation in disease, as a factor in the extent of utilization of the convalescent homes.

Before I discuss the standards that are requisite for effective convalescent work, but which are practically nowhere fully applied as yet, I should like to raise the question as to whether or not we have any information concerning the value of convalescent work as it is or has been performed. Strange as it may seem in view of the large investment of funds for institutional convalescence, this question has not as yet received serious consideration. Few studies of the value of institutional convalescent care for certain types of conditions have been made and the whole field is practically a virgin territory for research.

Neuropsychiatric Patients' Needs

Recently a scientific inquiry into one corner of the field was made by the advisory committee on convalescence of the Hospital Information and Service Bureau of the United Hospital Fund of New York. This was published by the Sturgis Fund. This study dealt with the much neglected neuropsychiatric patient. Its purpose was to ascertain whether or not the present type of institutional convalescent care was beneficial to this type of patient. If it should be found that it is of little or no value, then why should effort and money be wasted? The study referred to is based on a comparatively small number of cases, 327 in all. The work called for follow-up visits to the patients discharged from convalescent homes not less than a year previous to the visit. Complete data were ascertained from 239 patients.

The tabulation of the findings brought out some interesting facts and directed attention to some highly important aspects of this problem, as well as to the need for further study of this problem. Thirty-five and five-tenths per cent of the patients were between the ages of twenty and thirty years. This is a period of life in which many adjustments are necessary; it is the time when new relationships are entered into and new responsibilities are assumed. The preventive work must be done in the "teen" years. Proper mental hygiene at this time will do much to reduce the number of breakdowns and maladjustments in the later period.

The potentialities and more hopeful outlook for the psychoneurotic patients as compared with other types included in this study are indicated by the fact that this group showed the largest percentage of patients who had become adjusted to their environment and had gone back to work. The group to which the more or less indefinite term of "depression" was applied showed the second largest percentage of patients adjusted and

working; this seemed to indicate that most of these patients probably belonged in the psychoneurotic class.

The study further revealed the fact that 25 per cent of the patients who remained at the convalescent home until the home considered them ready for discharge were in need of further physical or mental adjustment. This finding called into question the adequacy of the convalescent care that they received. In the group which left against advice there was a larger proportion of subsequent commitment to state hospitals than among the group considered as "improved."

The value of such studies does not need to be argued here. May I say that until we have accurately kept records of all types of patients and make scientific analyses of such records, we are not justified in urging communities like New York to make additional investments in institutional convalescent care, which of necessity must be expensive, even if such institutions can be built for half the price of hospitals. It costs three to four thousand dollars a bed to build a fireproof institution and equip it adequately.

More thought must be given to the problem than has been the case in the past. The very use of the term "convalescence" is not clearly defined. It is often confused with "fresh air work" or with "preventorium" work. A convalescent patient, within the meaning of this discussion, is one who has passed the acute stage of illness, but is not yet able to resume his usual mode of life or activity. We should be precise in the statement of our problem.

Rest Homes One Solution

One of the first men in this country to call attention to the need of institutional convalescent care was Dr. Samuel Treat Armstrong. In an address before the New York Academy of Medicine early in 1908, he stressed the consideration of the subject from the standpoint of the hospital, and, referring to British experience, estimated that 20 per cent of the hospital ward patients need provision for convalescent care in special homes. I believe that our recent observations in New York City bear out this estimate, although it is difficult to lay down the rule in this respect with absolute definiteness. There are too many elements to be considered. He likewise called attention to the English Rest Homes, maintained by the hospitals, sometimes on hospital grounds, whither patients are transferred from the hospital as soon as they have passed the acute stage. From there, they may or may not be sent to the country convalescent homes.

I bring this matter to your attention, for it has been suggested that some of our large hospitals should establish such intramural auxiliary departments because of the advantages that come to the patient from remaining under the supervision of the physician who treated the patient or operated upon him while he was in the hospital. The reason why physicians and surgeons have not taken as much interest as they might have in convalescence is that the convalescent homes are so far removed from the city that there is no possibility of any direct supervision of the patients. Furthermore, the convalescent homes, in many cases, have not been more than country boarding houses.

Standards Formulated

Two years ago the public health committee of the New York Academy of Medicine, with the aid of four large special sub-committees, took up the problem of convalescent care and formulated what, to my knowledge, is the first attempt to evolve standards for the guidance of convalescent homes. Let me, in brief, present these standards to you.[1]

I. *Location of Convalescent Homes*: The location of convalescent homes should be preferably outside the strictly urban section but accessible by rail, trolley, or bus. In general a rural location seems more desirable than the seaside, although the latter has its advantages. Homes for cardiac patients should be situated in a rural district, not above 1,200 feet in altitude, rather than at the seaside.

II. *Size*: The size of the convalescent home should be governed by the type of patient cared for as well as by economic efficiency. A fifty to sixty-bed unit is considered an optimum size. Larger convalescent homes should consist of units that are multiples of this size.

III. *Equipment*: It should be the policy of the institutions to provide single or double rooms for adults; in no case should the rooms accommodate more than four persons. Dormitories for children should also be designed on the principle of a few beds in each ward, with proper spacing between beds. The equipment of convalescent homes should aim at comfort without extravagance and should provide adequate bathing and toilet facilities, reading and recreation rooms.

There should be a minimum of ordinary and occupational as well as physiotherapeutic equipment and supplies. The equipment should be more elaborate in institutions dealing with special types of cases.

Every institution should have adequate facili-

[1] The reports in full were published in Hospital Social Service, July, 1925.

ties for isolation. In case of a child-caring institution 2 per cent of the total number of beds should be in the isolation unit

The dining room, if in a separate building, should be connected by a covered passageway with the dormitories. The aim of every convalescent home should be to provide properly balanced, wholesome and appetizing food.

A gymnasium and outdoor as well as indoor recreation facilities are desirable features of a convalescent home. A convalescent home should be not only restorative but should serve as an educational influence in forming regular habits of life and sound mental attitudes.

IV. *Personnel*: Each institution, whether small or large, should have a trained nurse, a dietitian, and a recreational director. In the smaller institutions one person could combine two or three of these functions.

Every institution should have a visiting physician, chosen from among the local practitioners, who should be on call and should be required also to visit regularly.

Special institutions for the care of neurologic, cardiac, and surgical cases should have either a resident physician or a physician attending daily, who should be trained in the management of cases of the particular type cared for in the convalescent home.

All convalescent homes should have one or more consulting physicians who should be responsible for the general policy of the institution and who should visit it at least once a month in order to supervise the carrying out of the policy.

Segregation Is Desirable

V. *Segregation of Patients*: In a large institution consisting of several units, it is practical to take care of many types of patients. There are, however, few such institutions in existence. From the point of view of the care of the individual patient, as well as proper personnel and equipment, it is desirable to segregate specified types of patients in separate institutions.

It is desirable to segregate the bulk of neurological patients in special homes where the management and routine can be adjusted to their peculiar needs.

The patients suffering from heart disease require a method of management entirely different from the average run of patients. Here again it is desirable to have homes devoted exclusively to this type of patient.

Orthopedic patients also require a different type of equipment and management; they also differ from other patients in the length of time required for convalescence. They are, therefore, likewise better cared for in institutions especially designed for this type of work.

Patients recovering from respiratory diseases are often a source of danger and annoyance to other patients. It is therefore desirable to segregate them either in separate homes or in a separate pavilion of a large institution. Patients suffering from alimentary diseases or those requiring special diets are better cared for in institutions that are equipped with dietary and laboratory facilities required for the care of this type of patient.

What Is Best for Children

Children fare better if segregated in separate institutions because of the different regimen required for them; furthermore, the adult patients are usually disturbed by child patients treated in the same institution.

In convalescent homes for adults it is desirable to have the two sexes treated in the same institution, provided proper facilities and supervision can be provided.

With regard to color no rule can be laid down. Each individual institution must decide whether the mixing of white and colored patients is to the best interests of those served. The need for convalescent facilities for negro patients is generally recognized.

In the segregation of cases it is desirable to pay attention to the habits and standard of living of certain types of patients. Segregation in this respect is desirable for the welfare of patients of refinement.

Adequate facilities should be provided for pay patients of moderate means. Accommodations of this kind for children should likewise be provided.

The problem of providing facilities for convalescent mothers with children is a difficult one. Arrangements for taking care of the children outside should be made, and only if this is found to be impossible should children be accommodated with the mothers at the convalescent home.

VI. *The Relation of the Convalescent Home to the Hospital*: There should be a continuity of treatment control in order that the interest of the individual patient be protected and the best results obtained, particularly in surgical and cardiac cases. The hospital that is directly responsible for the treatment of the case while the patient is under its roof is morally responsible for it when the patient is transferred by the hospital to a convalescent home. Each hospital should designate one or several of its junior attendants to serve during specified periods as liaison officers who would respond to calls by the convalescent homes for consultation in cases that

do not appear to be making satisfactory progress.

VII. *Administrative Management*:

1. Admission. After a definite policy has been adopted by each of the convalescent homes with reference to the types of cases they are equipped and ready to take care of, and this has become generally known, the hospitals may be relied upon to refer the proper types of cases to the convalescent homes. There is no need for each convalescent home to have a city admitting office with a physician. Only cases that are referred through agencies other than hospitals should be made to undergo a physical examination in the city admitting office. It is suggested for reasons of economy that several of the smaller convalescent homes might maintain a joint admitting office.

It is also desirable that convalescent homes should maintain busses and be responsible for the transportation of patients to and from the convalescent homes, particularly in the cases of children. It might be practical for institutions in fairly close proximity to operate a bus service jointly.

2. Discharge of Patients: No patient should be discharged except upon the recommendation of the visiting physician. Recalcitrant or otherwise objectionable patients should be sent back either to their homes or to the institutions from whence they came.

3. Regimen: A carefully mapped out routine for the patients should be devised in consultation with the medical authorities of the institution. The medically prescribed play exercises and rest periods should be closely supervised, especially in the case of children and cardiac patients. The various chores that may be required of the patient should be included in the total amount of exercise prescribed.

Records Are Important

4. Records: In every convalescent home there should be kept a proper record of each patient. The record should include the findings of the physical examination and a chart of weight (which is particularly important in the case of children), a statement of the treatment and diet prescribed, and of any interruption in steady convalescence. In the institutions caring for special types of cases, such as children, cardiac and diabetic patients, the records should be more elaborate since they are important as an aid in the furthering of scientific knowledge.

VIII. *Social Service*: As the majority of patients come from hospitals and dispensaries, it is advisable that on discharge a record of progress be sent back to the hospital for special follow-up, as this may be of value to the medical authorities in institutions from which the patients were referred. When cases are referred by social agencies or private physicians, copies of the patients' records should be forwarded to those who referred the cases.

Convalescent homes should not attempt to do follow-up work, as this would be a duplication of effort and is the responsibility of the hospitals and the out-patient departments.

The whole problem of institutional convalescence is now up to the social engineers and the social workers as a challenge to their constructive endeavors.

PROPOSE MINIMUM STANDARDS FOR OBSTETRICAL DEPARTMENTS

In order to promote uniformity and a high standard of efficiency, in the obstetrical departments of approved hospitals, the following minimum standards for such service have been formulated and suggested to the American College of Surgeons:

1. That there shall be a properly organized and equipped department of obstetrics providing adequate accommodation for patients and newborn, and that such physical arrangements provide for segregation of this type of patient from all others in the institution.

2. That special facilities be available for the immediate segregation and isolation of all cases of infection, temperature and other conditions inimical to the safety and welfare of the patients in the department.

3. That there shall be adequate and competent medical, nursing and non-professional staff to provide for efficient supervision, medical, nursing and other services.

4. That there shall be readily available adequate laboratory and special treatment facilities under competent supervision and direction.

5. That there shall be complete and accurate case records on all patients treated, these to include: Identification data; past history, with special reference to menstrual functions, pregnancies, miscarriages, labors, if any, and general health; family history; history of present condition; report of physical examination, including particularly general examination with special examination of abdomen to determine duration of pregnancy, position of child, measurements, condition of soft parts, or any abnormalities that might be present; laboratory or other special examinations; provisional diagnosis; indications for operative procedures when carried out; history of labor; final diagnosis; post-partum progress, and condition on discharge as revealed through examination.

6. That no obstetrical operative procedures shall be carried out unless there has been a consultation and indications for such interference duly recorded on the patient's record, excepting in cases of emergency when time will not permit.

7. That the medical staff shall thoroughly analyze and review each month the clinical work of the department, with particular consideration of deaths, infections, complications or such conditions as are not conducive to the best end results.

8. That all student nurses, where practical and possible, be given theoretical instruction and practical experience in prenatal, parturient and post-partum care of the patient, as well as the care that is necessary for the newborn.



A TEACHING HOSPITAL THAT INCORPORATES NEW IDEAS

By Albert Kahn, Architect, Detroit, and Christopher G. Parnall, M.D., Rochester, N. Y.

THE completion of the hospital at the University of Michigan, Ann Arbor, Mich., represents the consummation of a building program initiated in 1917 when an appropriation of $325,000 was obtained from the state legislature as the first of three like sums that were to have been available at two-year intervals for the building of additional hospital facilities.

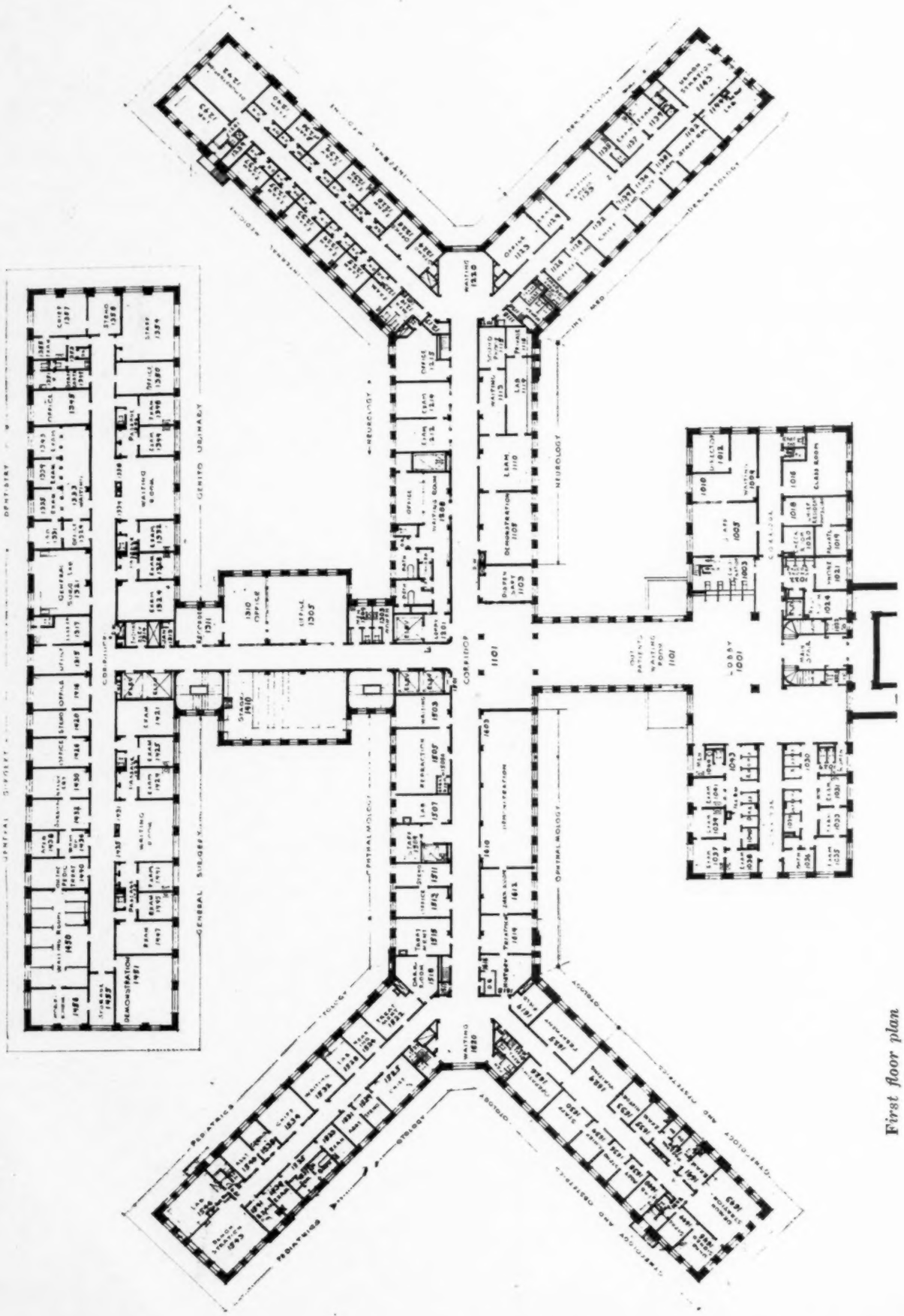
The first plan proved to be inadequate and the contemplated amount of money insufficient, so that the program had to be revised and instead of a million dollar structure, one ultimately costing $3,800,000 was designed in order to meet the demands for hospital service that the University of Michigan was expected to supply.

Two main considerations had to be taken into account in designing the new buildings; first, the need for additional beds for clinical instruction in connection with the medical school and, second, the need for sufficient capacity to care for the increasingly large number of patients who come from all over the state, and especially those sent in under the statutes of 1913 and 1915, which provide for the care of indigent poor at state or county expense.

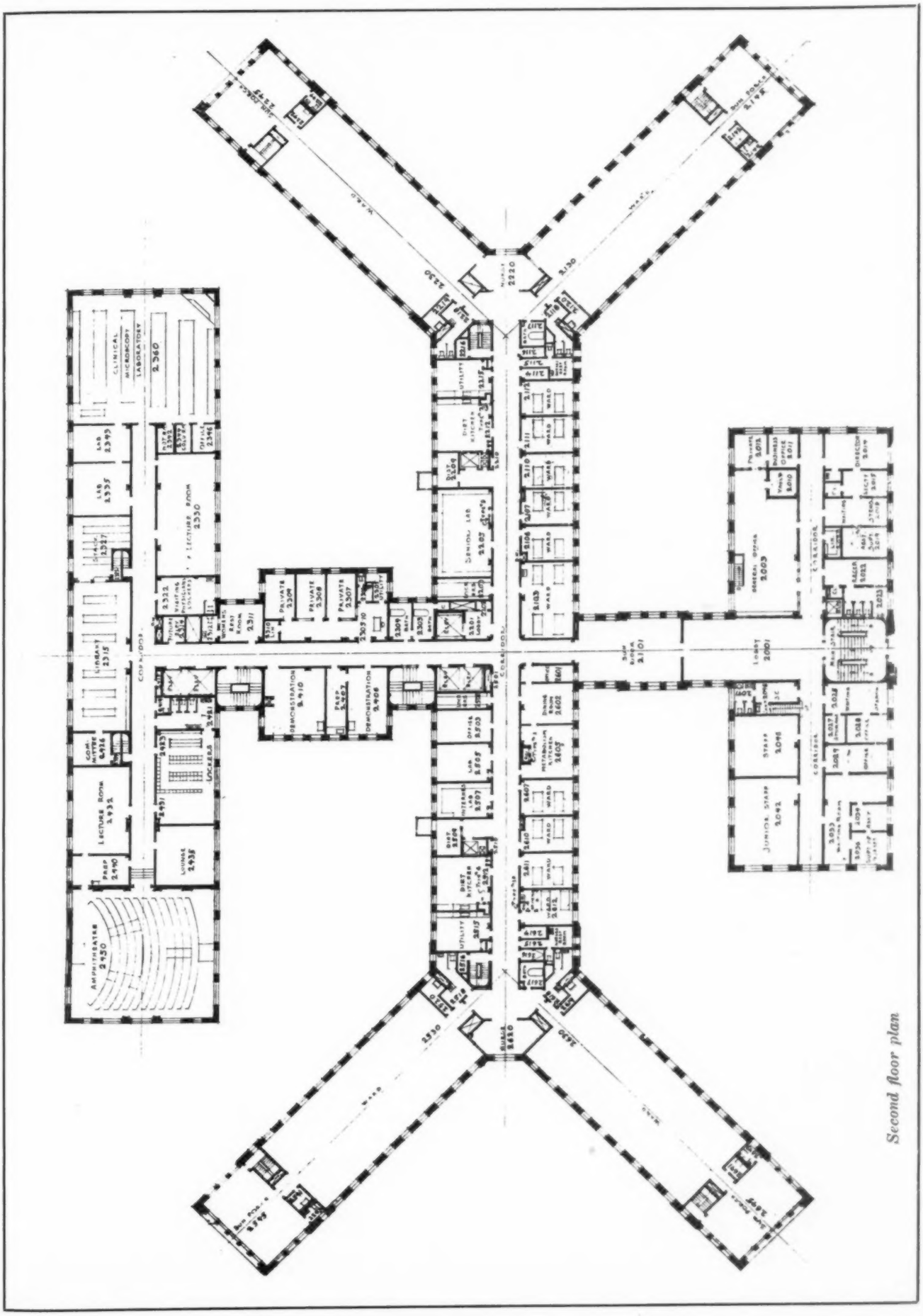
The writers were called upon early in 1918 to design a general hospital that would meet the above requirements. There were few precedents to guide them and no well established principles to follow in the planning of a great teaching hospital. Of a number of recent hospital developments in connection with medical schools, this was the first. Consequently, much time was taken up in considering various building schemes and in the arrangement of details after the general layout had been decided upon.

The most feasible location was on a large plot of ground having a rather steep northern slope. In planning the buildings it was desired to secure the maximum of air and light. Numerous combinations of wards and rooms were considered, but it was felt that for teaching purposes a moderate sized open ward unit, with a sufficient number of private and semi-private rooms in close proximity, offered advantages over small wards of from four to six beds. Experience in the old hospital showed that patients preferred the larger wards when not acutely ill. Consequently, with private and semi-private rooms for the recently operated upon surgical cases and the acute medical cases, a larger capacity could be obtained at less cost by using wards of eighteen beds for convalescent patients, patients being prepared for operation or those with relatively minor illnesses.

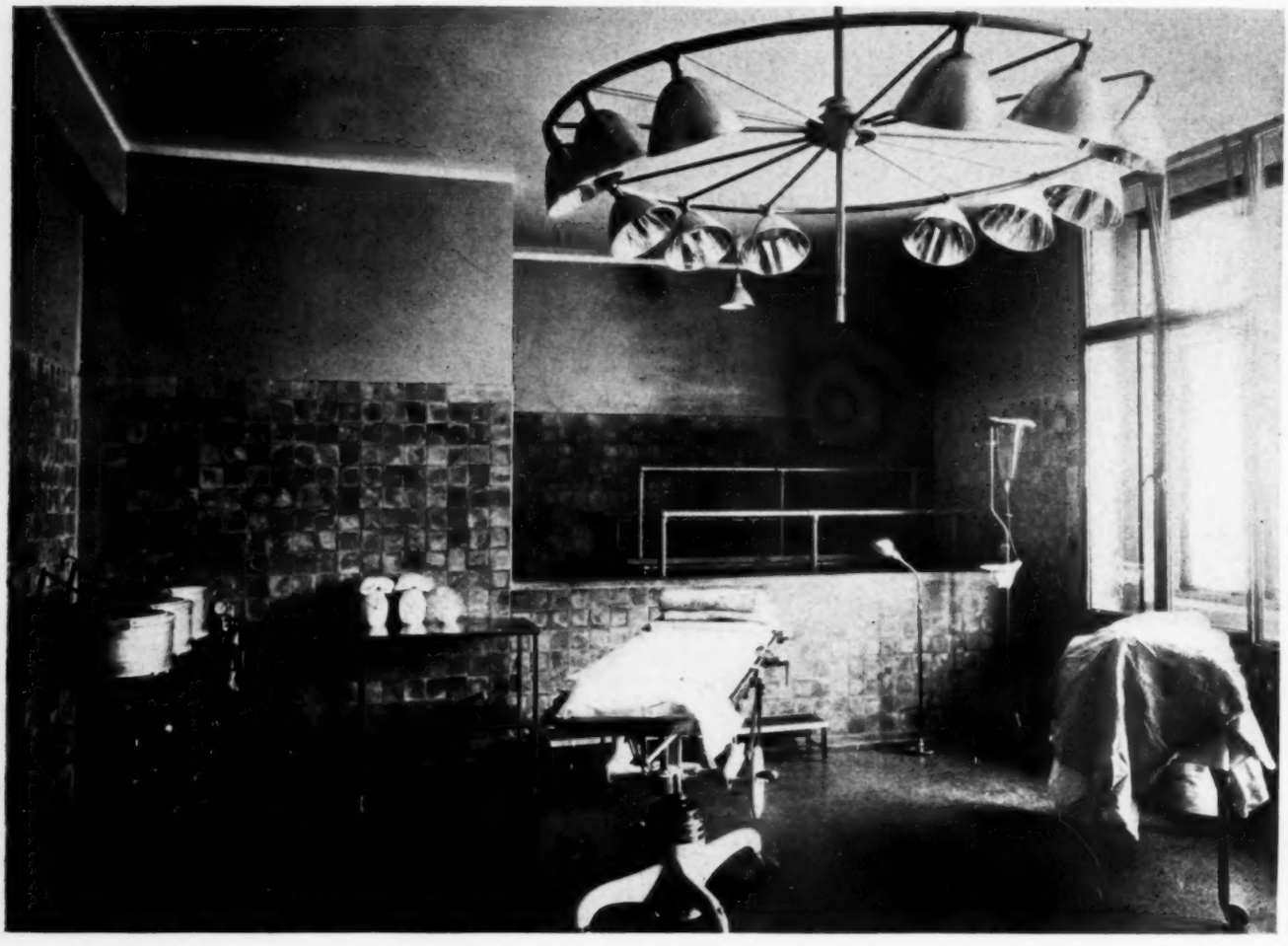
Teaching methods and hospital practice have undergone so many changes that every effort was made in the designing of the building to provide an elastic plan. For instance, with little change, the large eighteen-bed wards can be converted into six wards of four beds each. Conduit was specified to care for any one of a number of dif-



First floor plan



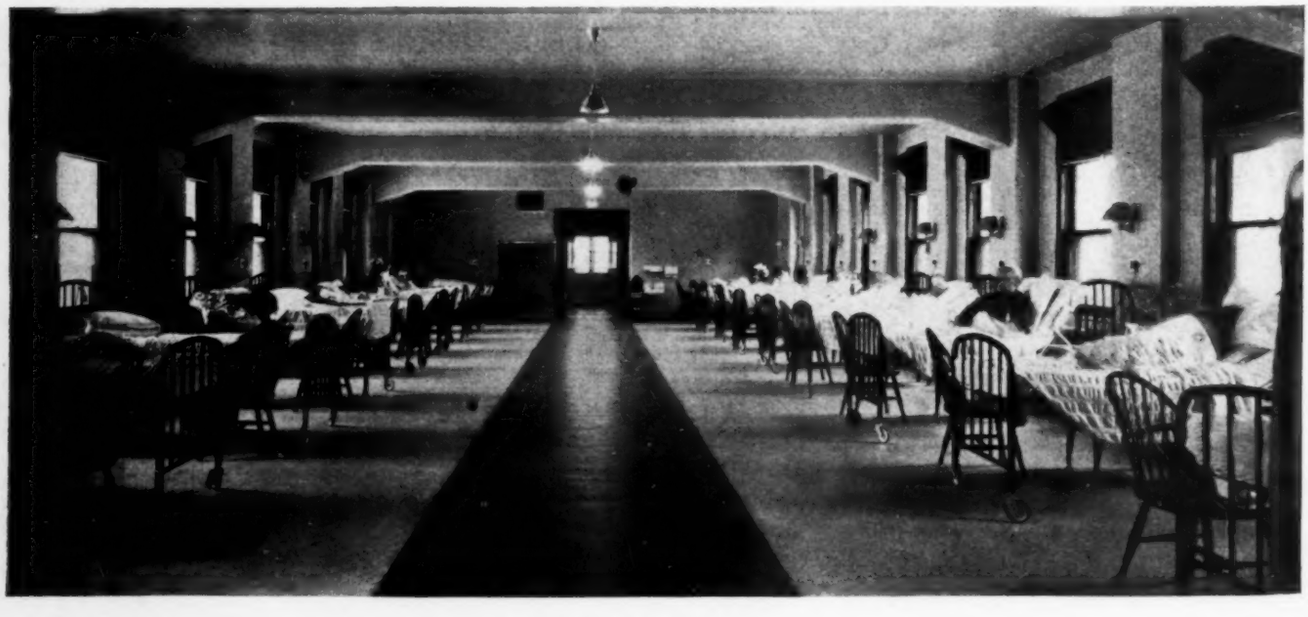
Second floor plan



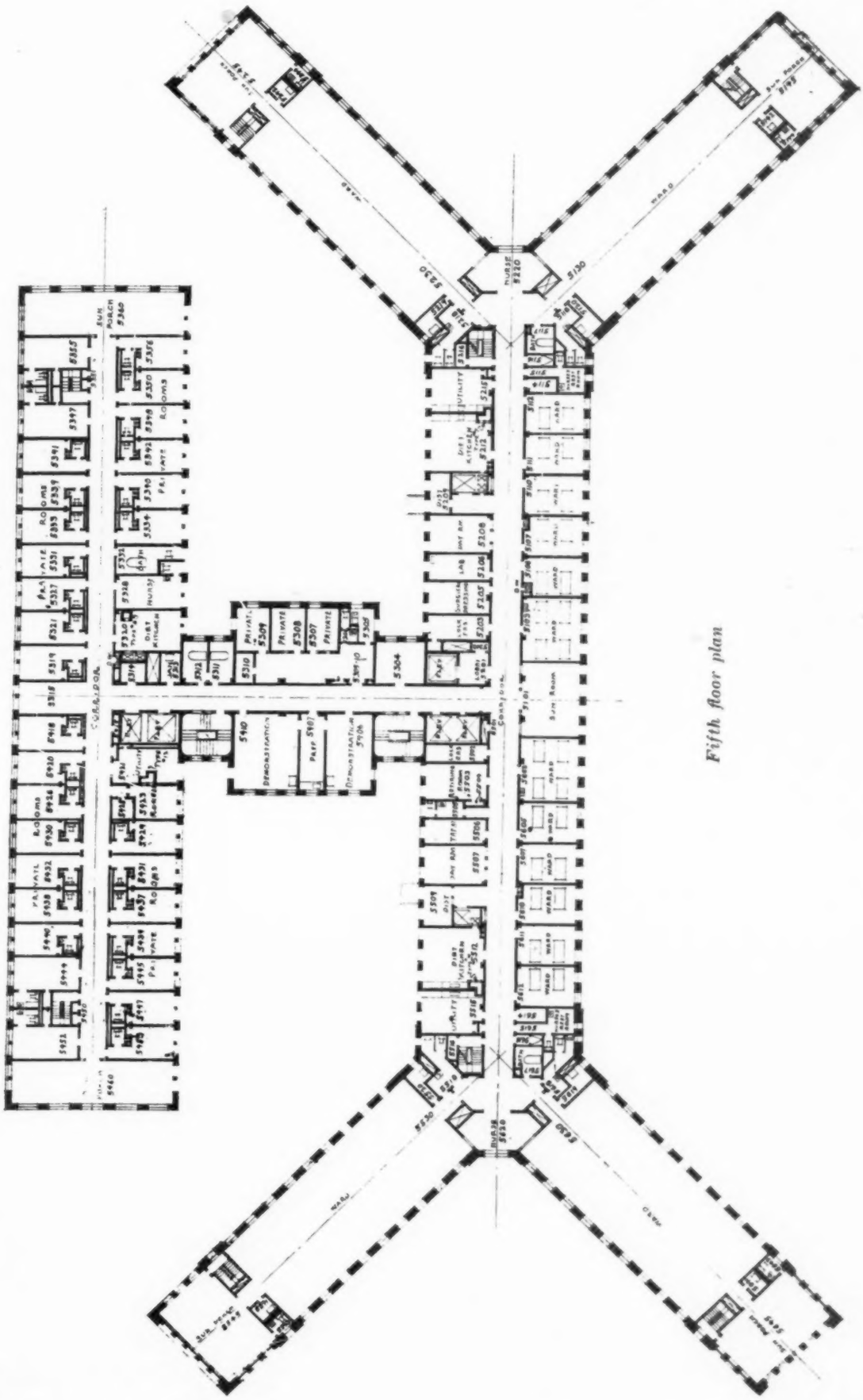
Operating room, with green tiles and gray walls.

ferent electrical installations. Laboratory units were standardized as far as possible. The arrangement of rooms was such as to permit of changes in function as future needs might require. The capacity of the hospital is 700 beds. Future expansion was provided for by making the foundations and walls strong enough to carry four additional stories.

The buildings as completed are a connected group, consisting of a small administration building of three stories in front, a main stem with ward wings in the form of the branches of a "V"



Typical eighteen-bed ward.



Fifth floor plan



On the right is shown the sun parlor and below the administration building.



at each end, and in the rear a building designed particularly to include space for teaching rooms, laboratories, operating rooms and other special services not connected directly with the bed care of patients. An extension of the connection between the main stem and the last building above mentioned, provides, on a typical floor, for a limited number of small isolation rooms on one side of the corridor, and on the other, demonstration rooms for groups of students, to which patients can be moved.

The main entrance to the hospital is so arranged that patients are diverted to the registration lobby by means of an easy ramp, while access to the administrative offices is by the main stairway.

Perhaps the most interesting feature of the hospital is the combined diagnostic unit and out-patient department. Instead of planning a separate wing with a number of floors, it was decided to utilize one entire floor of the connected hospital group for the admission and examining of patients. On this floor the various services of the hospital have examining rooms and ample provision is made for the accommodation of students in this section. Here also are the offices of the medical staff.

It was felt that the arrangement all on one floor for the admission of patients, out-patient examinations and teaching of undergraduate students and headquarters for the staff would have many advantages over a multiple-story plan. Patients may readily be referred from one clinic to another, are easily directed by the clerks at the control desks and are not confused or delayed by having to take elevators. A large percentage of the patients are from rural sections and are not accustomed to the use of elevators, and time is saved both for them and for the hospital employees in the one-floor arrangement. Furthermore, medical consultations between services are made easier by this plan.

Centrally located is a large record room for patients' histories. The unit history system is used and all records, both of in-patients and out-patients, are filed in this record room. Distribution of records from the record room to the various out-patient department units is effected by means of a pneumatic tube system. Provision is made on the second floor level for a students' locker room and lounge, and there are numerous demonstration rooms accommodating groups of from fifteen to thirty students. Only small groups

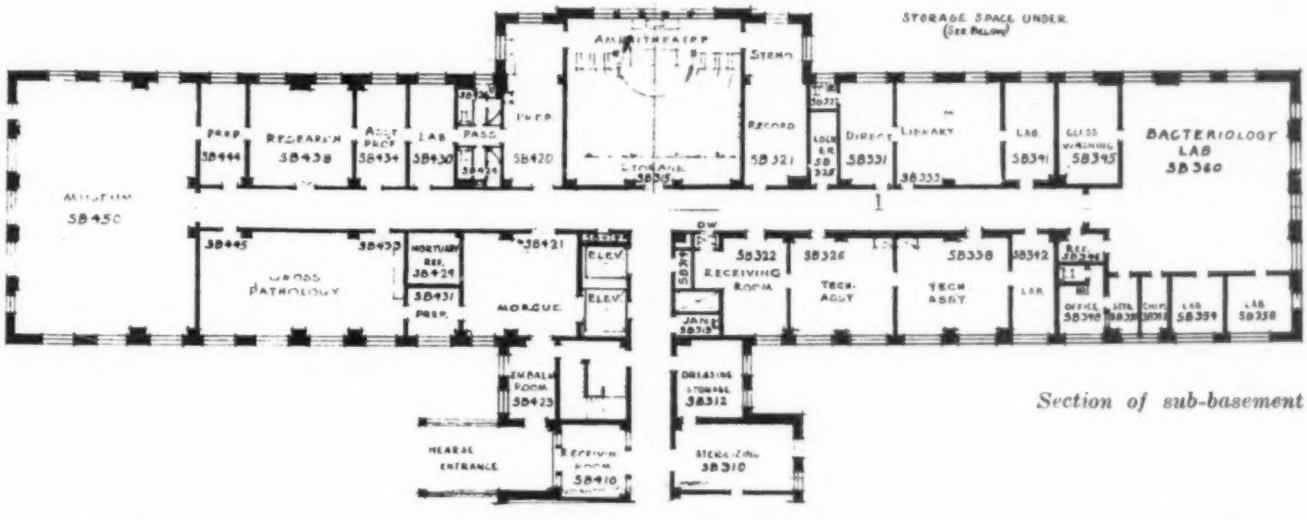
of students need be in the corridors of the hospital proper at any time. The various teaching units are so placed that it is not necessary, in order to go from one to the other, to pass through the corridors in the ward section.

A very extensive x-ray department is on the floor below the diagnostic unit, accessible for both in-patients and out-patients. The laboratory arrangement provides small laboratories in connection with the wards for the use of house officers, and in the out-patient clinics. A central hospital clinical laboratory is provided for the more elaborate chemical and biological tests, while research laboratories are available for the members of the staff who are working on special problems.

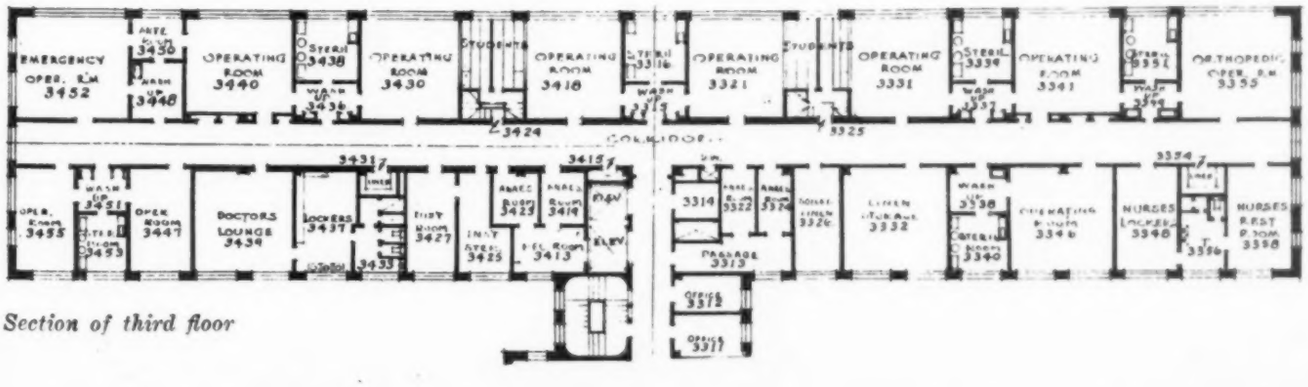
The hospital is not primarily for private patients but provision is made for approximately 100 in small single rooms, each with its own lavatory. On the medical ward floor is a metabolism kitchen and a small dining room for the use of out-patients under observation, and also for ambulatory cases in the wards. In the culinary department is a pay cafeteria for the use of employees. This has worked out satisfactorily and has overcome some of the objections usually encountered in the feeding of employees. In the corridor, at the convergence of the ward entrances, special acoustic treatment has been used, which eliminates the usual reverberation so annoying in most concrete and steel buildings.

The water supply being extremely hard, the double problem of economy and a satisfactory quality of water was solved by the use of tempered, softened water in all laboratory fixtures. This water is simply heated to a comfortable temperature for washing, automatically controlled, and supplied through a spring foot valve in the floor. This valve is a new type, has a removable seat and is easily kept in order. Refrigeration for the storage of food and for the various diet kitchens is provided by two machines aggregating eighty tons capacity. The location of the hospital in a town of only 25,000 population necessitates large storage capacity, and car load purchases result in a marked saving in buying.

The total cost of the hospital amounted to $3,400,000, the cost per cubic foot being $0.61, and the cost per bed $4,869. This is exclusive of equipment, which cost approximately $500,000. The cubic feet capacity is 5,600,000, the percentage of space for teaching being one-third of the total area. The area of a typical floor is 44,880 square feet and the lineal feet of corridors is 5,650. There are 2,217 window openings and 1,270 doors throughout the entire building.



Section of sub-basement



Section of third floor

HOW SANATORIUM PATIENTS ARE ADMITTED AND THEIR DAILY SCHEDULE*

By Ernest S. Mariette, M.D., Superintendent and Medical Director, Glen Lake Sanatorium,
Oak Terrace, Minn.

EXPERIENCE gained in the last twenty-two years, during which time tuberculosis hospital sanatoriums have increased from 100 to more than 600, with over 300 of these supported by public funds, warrants some definite conclusions concerning the rules of admission to a city and county hospital sanatorium.

Pioneers in the sanatorium movement felt that the chief purpose of a sanatorium should be the care of the individual, that is, the care and treatment of the early case. They even went so far as to discharge cases that did not do well. While the sanatorium treatment of early cases is still a prime necessity, the public health idea or the hospitalization of the open case for preventive as well as curative purposes is growing more and more popular.

For the purpose of this paper I shall assume that the aim of the institution shall be primarily to act as a center for the segregation of the foci of infection, and, in addition, to provide a place where the tuberculous of the community can receive care and treatment with an opportunity to recover from their disease, or, if recovery is impossible shall receive as humane care as possible during their terminal illness.

Give Preference to Urgent Cases

The more recent laws governing admission of patients to a city and county hospital sanatorium, of which the Minnesota law is a good example, recognize that the welfare of the community has precedence over the welfare of the individual, but that the individual should not be overlooked. Therefore, these laws specify that any type of tuberculosis, that is pulmonary or extra-pulmonary, in any stage, early or advanced, open (infectious) or closed (non-infectious), may be admitted for either segregation or care and treatment; but that preference must always be given to the more advanced or urgent case. Hence, any hospital while acting primarily as a center of segregation for the open case, can, if large enough, care for the early case as well.

If a hospital is to act effectively as a center for the segregation of the infectious case, the patient must be cared for over a considerable period of time. Therefore it is obvious that a community can derive no value whatever from the care of the terminal case, that is, one who dies within a few hours or a few weeks after admission. As a focus of infection such a case has been active for a long time, and has already done all the damage possible. The main consideration in such a case is humane care during the patient's few remaining days. If it is impossible for him to obtain this in his home then he should be admitted to the sanatorium.

Length of Stay to Be Indefinite

Whenever there is a waiting list that necessitates a selection of patients, the more urgent case can be more intelligently determined if all admissions are made through an out-patient department. Otherwise each physician will urge that his case should be hospitalized before the others.

The length of time a patient may receive care in a sanatorium should not be limited by law. Tuberculosis is a chronic disease and if either the patient or the community is to derive any benefit from sanatorium treatment it should be carried out over a fairly long period of time, varying with each individual case. The aim of the institution should be to hospitalize all patients until they can be returned to the community with safety to the public and to themselves. Anything less would mean that the hospital was not acting effectively as a center for the segregation of the infectious case, and that the care and treatment afforded patients were not continued long enough to give reasonable assurance against relapse. Therefore, the length of stay of all patients should be indefinite and should depend solely upon their individual response to treatment.

This brings up the question of the size of the sanatorium or the number of beds any community should provide for the hospitalization of its tuberculous cases. The old standard of one bed per death was accepted when sanatoriums were attempting to care for the early case, and where the patient's stay was limited. It seems scarcely adequate now that we are caring for a different type of case. One community has about three beds for each death and still has a waiting list. I know of no community that has as yet attempted to provide one bed for every case that applies. It would hardly seem wise to do so in the face of the rapid decline in the death rate which has fallen

*This is the seventh of a series of articles to appear in succeeding issues of THE MODERN HOSPITAL, dealing with the planning, equipment, organization and operation of tuberculosis sanatoriums and preventoriums. This series is prepared under the direction of Robinson Bosworth, M.D., Rockford Municipal Tuberculosis Sanatorium, Rockford, Illinois.

from 212 per 100,000 in 1900, to 89 per 100,000 in 1925.

In determining whether non-residents of the sanatorium district shall or shall not be admitted it must first be decided whether the city and county sanatorium is to be a part of a state-wide program for the hospitalization of the tuberculous or whether it is to be merely an independent locally operated sanatorium.

Tuberculosis is a universal disease and the problem of its control extends far beyond the confines of any city. Therefore, except possibly in the case of very large cities which are in a class by themselves, there can be no logical argument for an independent sanatorium. The city and county sanatorium as a part of a state-wide program should permit the admission of any resident of the state but should always give preference to a resident of the sanatorium district. The resident of the county, outside of the sanatorium district, would, of course, be admitted on a pay basis approximating the daily per capita cost of the sanatorium.

Because the public health aspect of the sanatorium should predominate over the rights of the individual, provision should be made for the care of the so-called transient who is temporarily residing within the confines of the sanatorium district. Such a case in an emergency should be admitted to the sanatorium at once, and the question of legal residence determined later. If this can be established in some other county, then the case should either be returned to that county or cared for in the sanatorium at the expense of the other county.

Admission Should Be Voluntary

Admission or commitment to a sanatorium should always be voluntary. Many will argue that when a patient is in the advanced stage of the disease and is a source of infection, he should be compelled to enter a sanatorium. Experience has shown that this does not work out satisfactorily. Human nature is the determining factor here. People do not want to do what they are compelled to do and often will not go to a doctor because they are afraid he will compel them to enter the sanatorium. Hospitals where compulsory admittance was attempted have later returned to the voluntary method, although it is generally admitted that the legal restrictions have a restraining influence on the dangerous or careless patient.

While no case should be denied treatment because of lack of funds, still provision should be made whereby those who can afford to do so should pay for their care in the sanatorium in proportion to their means up to the actual cost.

Inasmuch as tuberculosis is a universal disease and has a public health aspect, there are persons who believe that sanatorium treatment should be as free as education. But there is a difference. While the school merely provides education and in a few cases goes so far as to provide free lunches and rest rooms, the sanatorium provides medical and nursing supervision, and in addition, houses and feeds its patients. Because of this extra function others maintain that if possible a patient should pay the food cost at least, or, what it would cost to feed him in his own home were he not admitted to the sanatorium.

How Shall Charge Be Fixed?

In arriving at a fair charge one should remember that the length of stay may be long, up to several years, making the problem of pay much more serious than if the stay is to be only a few weeks. This is especially important when the wage-earner is the one to be hospitalized. The exact amount to be paid by any individual should be left to the jurisdiction of the board in charge of the sanatorium. It cannot be fixed by law. The law can, however, fix the maximum charge if it seems best to do so.

Whenever the city and county sanatorium is a part of the state-wide program for the hospitalization of the tuberculous, the state should help each sanatorium district in the care of its tuberculous by paying the sanatorium a specified sum for each free case. This varies in different states; in Minnesota it is five dollars per week.

Because of the nature of tuberculosis more can be accomplished for future generations by the prevention of "adult" tuberculosis than through attempts to cure it. Therefore, every sanatorium should make some provision separated from the adults, of course, for the care of children with tuberculosis. This is to be determined according to the diagnostic standards adopted by the National Tuberculosis Association.

Children with pulmonary tuberculosis should be admitted on the same basis as adults.

The rules of conduct for patients in a city and county sanatorium hospital are of the utmost importance because in many institutions patients remain on an average of eight or ten months, and much of this time they are up and about with nothing much to do.

The average adult is used to settling affairs for himself and determining his own line of conduct. Moreover his life in the active, competitive world has afforded him, in addition to a marked degree of independence, an outlet for his energy. The change from that type of life to the docile, phleg-

matic, closely supervised and regulated life of the tuberculous individual is marked and often irritating. To make this change satisfactorily requires patience on the part of the staff and the patient. Many have said, "We are serious minded adults who wish to get well. Why is it necessary for us to conform to all these rules?" Therefore the manner in which these rules are presented will have a great deal to do with the manner in which they are accepted and the degree to which they are observed.

Explain Purpose of Rules

A frank talk with the patient when he is admitted will go far to put him in the proper mental attitude. While we realize there is nothing quite so boresome as rules, nevertheless in any association of people there must exist laws defining the limits of individual liberties, otherwise chaos and anarchy result.

"Your sanatorium," it should be explained, "has prepared its own code of laws for your guidance; and while 'thou shalt' and 'thou shalt not' have been kept in the background, they cannot be entirely ignored. The rules should be regarded not as automatic, arbitrary restrictions prepared solely for the purpose of making the sanatorium run smoothly, but as the natural and normal regulations essential to your welfare as long as you are a patient in this sanatorium or have tuberculosis, and for some time afterwards, if you wish to retain your health.

"You became a member of this community of your own free will; you can leave any time you wish; but while you are here you should make up your mind to get all you can out of it. Otherwise, you, rather than the institution, will be the loser.

"Your sanatorium is a school and hospital for the education and treatment of people who are sick with tuberculosis. Its only excuse for existence is to restore you to health and the social status of a wage-earner in the shortest possible time.

"Everything worth having costs something. To regain your health you will have to pay the price of strict adherence to the routine and regulation of the sanatorium. Is your health worth it? Surely it is. You can no more expect to win in this fight against tuberculosis without the aid of your physician than a football team could win without its coach.

"Every activity of the hospital is centered about making it as easy as possible for you to travel on the road to health. We have tried to develop in this sanatorium a spirit of peaceful endeavor, helpfulness, earnestness, good humor, kindliness, tolerance and forbearance. Develop that spirit in yourself and as far as possible in the entire institution.

"Heaven and the sanatorium help those who help themselves, but neither heaven nor the sanatorium can help an unwilling patient."

The two "R's," rest and regulation, are the foundation of the tuberculosis cure. The regulation may mean simply rest, more rest, or absolute rest; it may mean a little exercise, more exercise, or unlimited exercise.

Ambulant patients are not allowed to get up before 6:30 a.m. and must be up by 7 a.m. They are expected to take a cold chest bath every morning and to be ready for breakfast by 7:30. After breakfast, beds are to be made and personal belongings put in order. Shaving is to be done in this period. All these things must be done before 9:00 a.m.

From 9:00 to 11:15 a.m., the patients rest or exercise as prescribed by the physician. Rest means lying in bed in the ward or on the porch. It does not mean playing chess, checkers, or cards, except single solitaire; but the patient may read or knit in moderate amounts upon permission. After rest hours the beds are to be straightened up and the wards left in an orderly condition.

Rest Hours Essential

There is a morning lunch at 10:00 a.m. for those who are under weight. Otherwise, this between-meal lunch is given only upon the order of the physician.

From 11:15 to 11:45 a.m. is rest hour. No talking, reading, or knitting is allowed during any rest hour. Each rest hour is to be spent in bed. At 11:45 patients are expected to get ready for dinner. At this time both sexes may gather in the lobby for a short social period before dinner, which starts at 12:15.

Another rest hour for all patients begins at one o'clock and lasts until 3:00 p.m. The same rules apply and the patient is to sleep if possible. There is an afternoon lunch at 3:30 p.m. for those who are under weight. Then from 3:15 to 5:00 patients may rest or exercise as prescribed by the physician.

At 5:00 p.m. all patients prepare for supper and may gather again for a short social period, with supper at 5:30. From 6 to 7 p.m. there is another rest hour unless otherwise ordered by the physician. During this period patients are to lie quietly in bed with the lights out, but radio concerts will be broadcasted at this time.

All ambulant and semi-ambulant patients are urged to gather in the auditorium for an hour of social intercourse during their recreation hour from 7 to 8 p.m. Evening lunch is served from

8 to 8:30, and lights are all turned out at 9 p.m.

It must be noticed that the effectiveness of heliotherapy depends upon the sunshine, consequently it is given at any time during the day when the sun is shining. Rest hours will be taken when heliotherapy is finished or when it is cloudy.

We designate as ambulant a patient who goes to the main dining room for three meals a day and is on exercise. A semi-ambulant patient is one who goes to three meals a day but has no other exercise. All ambulant and semi-ambulant patients, unless otherwise ordered, are to make their own beds.

Rules for Bed Patients

All patients who do not go to the main dining room for three meals a day are classified as bed patients. Some are classified as strict bed patients, and as such are not to leave their beds for any purpose. Others are bed patients with one, two, or three bathroom privileges. Such patients are to leave their beds only to go to the washroom and otherwise only upon special permission from their physician. They are not to visit from room to room or walk around the corridors or to leave their beds when they have visitors.

The daily schedule for children is as follows: Breakfast at 7 a.m., followed by a rest period of one-half hour.

At 8 a.m. they either have school work or sun treatment. During the summer all children receive three hours of sun treatment, divided into two periods of one and one-half hours each, followed by a rest period of one-half hour. Some school work is given during the sun period. Artificial light treatment of one-half hour periods, followed by one-half hour rest periods is given during the rest of the year. During this period the school work takes up most of the morning, and in general is made up of two hours of academic work and one hour of occupational therapy work, together with a supervised study period when it is necessary.

There is a morning lunch at 10:00 a.m. Dinner is served at 12 o'clock, and is followed by a rest period from 1:00 to 3:00 p.m. There is an afternoon lunch at 3:00 p.m. From 3:00 to 5:00 p.m. the children have an outdoor recreation period under the supervision of teachers. Occasionally school work is done during this period.

Supper is served at 5:00 p.m. and 5:30 to 6:30 p.m. is another rest hour unless otherwise ordered by the physician. Evening lunch is served at 7:00 p.m. From 7:00 to 8:00 p.m. is another recreation period. This is supervised three evenings each week by one of the teachers. The small children of school age go to bed at 8:00 p.m. and the larger children at 8:30 p.m.

As rest is the most essential factor in the treatment of tuberculosis, every patient is put to bed on admission to the sanatorium. Each patient should be confined in a single room while nose and throat cultures are taken, to rule out the presence or absence of diphtheria. Later he may be moved to another room where there are other patients.

Hazing of the new arrivals seems to be practically a universal custom in colleges and sanatoriums. It is frowned upon and discouraged in colleges, but there is an additional reason why it should not be tolerated in tuberculosis hospitals. Entering patients are usually depressed enough at having to leave their homes and face the prospects of a year or more of segregation and treatment, without being scared by tales, usually untrue, of people who have just died. In one instance a patient had a hemorrhage shortly after being frightened as a result of hazing. The patient was not touched during this particular hazing episode.

Care of the teeth is even more important in a sick person than in one who is normal, consequently, scrupulous care is insisted upon and careful attention is given to all mouth infections.

Much may be said for and also something against the treatment of men and women in the same sanatorium. It is difficult to make exact rules for what is best covered by good sense and good breeding, but any overstepping of the bounds of propriety will be met by stringent restrictions. Definite "pairing off" is always discouraged and may have to be dealt with by dismissal. The proper meeting place for men and women is in the general assembly room. Patients are not allowed to go walking with other patients, employees or nurses of the opposite sex.

Complaints Should Be Made at Office

Noisy or boisterous conduct is not consistent with the purposes of the sanatorium and injures the progress of all concerned. Profane or obscene language will not be permitted. Anyone whose behavior is obnoxious to others may be discharged at any time without notice.

The bringing in or the use of alcohol in any form is absolutely forbidden. Any infringement of this rule leads to discharge and legal prosecution.

Beneficiaries of the United States Veterans Bureau are under exactly the same routine and regulations as the civilian, and are admitted, treated and discharged in exactly the same way.

Patients are urged to make any complaints to the office, where they will be treated courteously and confidentially.

Tuberculosis is caused by the tubercle bacillus which is spread by or through the excreta of people and animals who are ill with it. Human sputum and cow's milk are by far the most common sources of infection, and of these two, human sputum is the cause of most of the disease in human beings.

Patient Must Protect Himself

For that reason it is of the utmost importance for the patient to learn to protect himself and others. He should be trained so that the most painstaking care in coughing becomes automatic. The paper napkin, not cloth, which is unsanitary, should be used once to cover the face when coughing and sneezing and then disposed of by putting it into a paper bag which is kept in the room for that purpose. If the patient is anywhere else he should wrap the soiled napkin in a fresh one and put it in his pocket.

Expectoration should always be into the sputum cup and not into a paper napkin. Whenever the patient leaves his bedside he should carry a pocket sputum cup and never in any case expectorate on to the ground. Never, on any account, should one swallow the sputum. It may lead to intestinal tuberculosis.

The only cough of any value is that which brings up sputum. Unnecessary coughing is one of the most harmful forms of over-exercise; it irritates the throat and may lead to disease of the larynx. Practice and will power help to suppress a cough. Real rest, mental and physical, including silence, is one of the best cures known for a cough.

The use of tobacco in any form has a harmful effect upon the tuberculosis process in the lungs, because of the action of tobacco upon the cardiac and respiratory systems. The cardiac rate is increased, interfering with the formation of fibrosis upon which the cure of tuberculosis depends. In fact, snuff is so harmful that patients who were on the road to recovery can date their decline from the day they began to use it. People should not be discharged if this rule is broken, however, because the use of tobacco and snuff is such a universal habit that it may be difficult for some to give it up.

Some doctors believe that visitors in a tuberculosis hospital should be limited to two afternoons a week, while others believe that short visiting hours every afternoon and evening are more satisfactory. Local conditions will have to determine which of the two plans shall be adopted and whether a compromise should be arrived at. At Glen Lake Sanatorium the visiting hours for adults are from 3:30 to 5:00 p.m. every day, and from 7:15 to 8:15 p.m. Because most of the children are in school, it has been found advisable to limit visiting hours in their building to 3:30 to 5:00 p.m. on Saturdays and Sunday afternoons only.

Talking and visiting takes strength and energy which the patient sometimes can ill afford to give, consequently visitors' hours may be curtailed if the physician feels that the regular hours are longer than the patient's physical condition warrants.

Ambulant and semi-ambulant patients may obtain written permission to visit infirmary patients when not inconsistent with the condition of health of the infirmary patient.

Visitors are not supposed to bring food to the patient except upon permission from his physician.

No children under six years of age are allowed to visit in the rooms, and it would be far better if they were not brought into the building at all. Although every effort is made to keep the sanatorium as clean as possible, there will always be with us patients who are careless, and children who have no fear of dirt cannot possibly realize the danger of infection. Of course, parents wish to see their children, but if they really love them they will do everything possible to minimize the danger of infection and not permit them to be brought into any tuberculosis sanatorium.

Entertainment for Patients

There is a difficult period to bridge over when the patient is removed from active, independent, physical life to the phlegmatic, dull routine of a sanatorium. If he is exceedingly ill the time may not pass so slowly, but once he begins to get well his thoughts will turn to the question of how to pass his time.

Patients usually have a good time at a sanatorium. In fact, we attempt to give them as good a time as they can stand, at the same time realizing that a good time was not the object of their coming. At first, only a moderate amount of reading is permitted. Even too active a correspondence with relatives or friends may be harmful. The patient should not write as much as one letter a day if his temperature is over 101.5°. Excitement of any sort increases the pulse rate and respiratory rate, and is to be avoided. This includes gambling of any sort, bridge, whist, and poker.

If there is a radio outlet beside each bed, the patients are encouraged to make as full use of

the radio as their physical condition and the hospital routine will permit. Radio should be turned on from 7 a.m. to 9 p.m. except from 11:15 to 11:45 a.m. and from 1:00 to 3:00 p.m.

Occupational therapy is exceedingly valuable during the long convalescence and the patient is urged to make as much use of it as he safely can. We interpret occupational therapy to mean any useful occupation, carried on under medical supervision of course, from the making of articles to pursuing a course of study. Within prescribed limits, the patient may make as much use of the library as he cares to.

Exercise Must Be Regulated

It is of the utmost importance that exercise should be carefully regulated from the beginning to the end of treatment. First exercise will naturally consist of going to the bathroom. Later the patient may go to the dining room for one meal a day, gradually increasing to two and finally to three. When this regimen has been proved safe, he may be assigned to walking exercise and to some useful work around the hospital. Those on walking exercise are required to spend the entire time walking, not part of it riding. Unless sent on errands, patients are not allowed in the laundry, the engine room, the storehouse, butcher shop, pasteurization plant, laboratory, the animal room, the kitchen or dining rooms, except at mealtime.

As the essence of sanatorium life is regulation, patients are required to sign out and in whenever leaving the ward or building for meals, exercise, or errands.

Riding privilege is limited to one hour a day and will be granted to ambulant and semi-ambulant patients only on the recommendation of the staff physician.

A ten-hour leave of absence once a month, dependent upon good behavior, will be granted to all patients who are taking a half-hour of exercise or more. A patient who is taking this amount of exercise, and has been in the sanatorium for six months, may, with the consent of his physician, be granted an extra day's leave in town. An extra day may also be allowed at Thanksgiving or Christmas for those who can take it without harm to themselves. We have to grant leaves most carefully, for the patient may undo in one week more than he has accomplished at the sanatorium.

At all times patients should be urged to take pride in the sanatorium, keeping it tidy and attractive both inside and out. They should also be encouraged to take pride in their personal appearance and to acquire a feeling of personal obligation in guarding the welfare of others.

HOW AN ENDOWMENT WAS CREATED FROM AN EMPLOYEE'S SAVINGS

How hospitals may obtain an endowment fund from a small sum accumulated from the earnings of an individual, in this case an employee, is illustrated in the example of the recent fund of $7,000 that has been donated by Lydia A. M. Dueker, an employee of the Methodist Episcopal Hospital, Omaha, Neb. The fund has been presented to the hospital with the intention that it be increased ultimately to $40,000, to be used to establish the Mary M. Dueker Chair of Teaching in the school of nursing of the hospital and deaconess home, in memory of the donor's sister.

The story of how the fund was accumulated is interesting as an example of what has actually been saved by a hospital employee who received a wage of only fourteen dollars a month and maintenance. The $7,000 fund was thus accumulated from this wage by the late Mary M. Dueker, a deaconess of the hospital, over a period of twenty-seven years. After her graduation from the hospital training school, she served eight years as a head nurse and principal of the school of nursing, ten years as surgical supervisor and eight years as supervisor of the eye, ear, nose and throat department. Upon her death, August 6, 1926, she willed her estate of $7,000 to her sister, who in turn has donated the sum to the hospital, plus the sum of $643 which was taken from the fund, upon the death of Mary M. Dueker, for funeral expenses.

WORKMEN'S COMPENSATION IN THE STATE OF MASSACHUSETTS

Prior to the law which became effective in 1912, the common law and liability act of the State of Massachusetts gave rights to about 10 per cent of the injured and that with difficulty, according to Joseph A. Parker, Massachusetts Industrial Board, who presented the Workmen's Compensation Act to that body in 1905.

In 1914 under protest by manufacturers, a first-aid kit valued at $5 was put in most of the manufacturing plants.

Under the compensation act the employee now has compensation, unless the reason for his injury is his own wilful misconduct, and the compensation entitles him to medical attention for the first two weeks after injury or a longer period at the discretion of the industrial accident board.

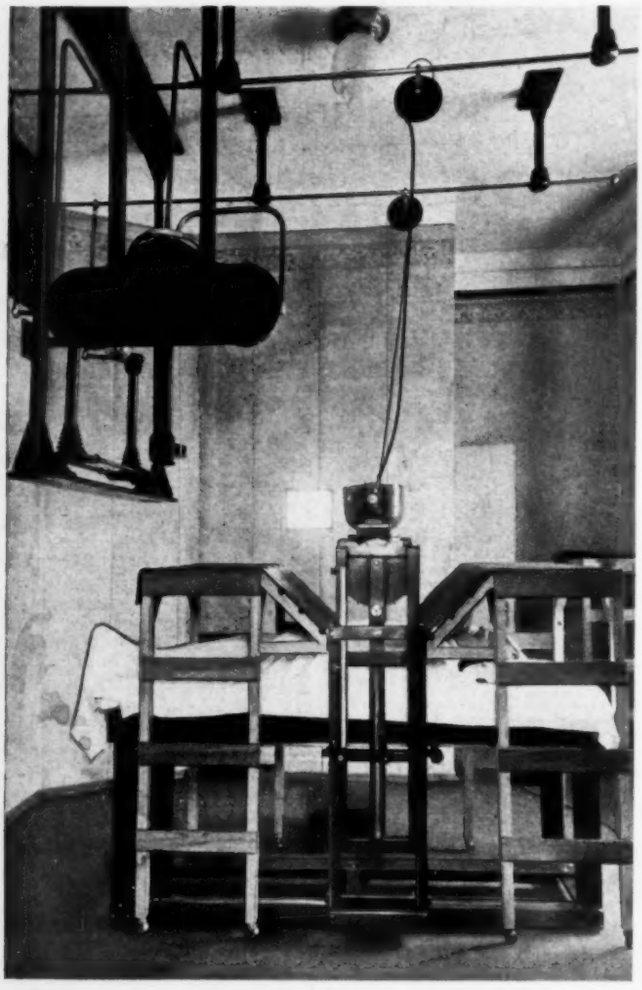
Because of so many injuries requiring more than two weeks' care, termed "unusual cases," the industrial board in 1914 requested the legislature to give the board authority to require the payment of bills for medical treatment beyond the first two weeks after injury in "unusual cases" when the injury is so serious as to require and warrant such additional medical treatment. The legislature did not adopt the recommendation in its entirety, and did not give the board authority to require the insurer to pay such expenses beyond the first two weeks.

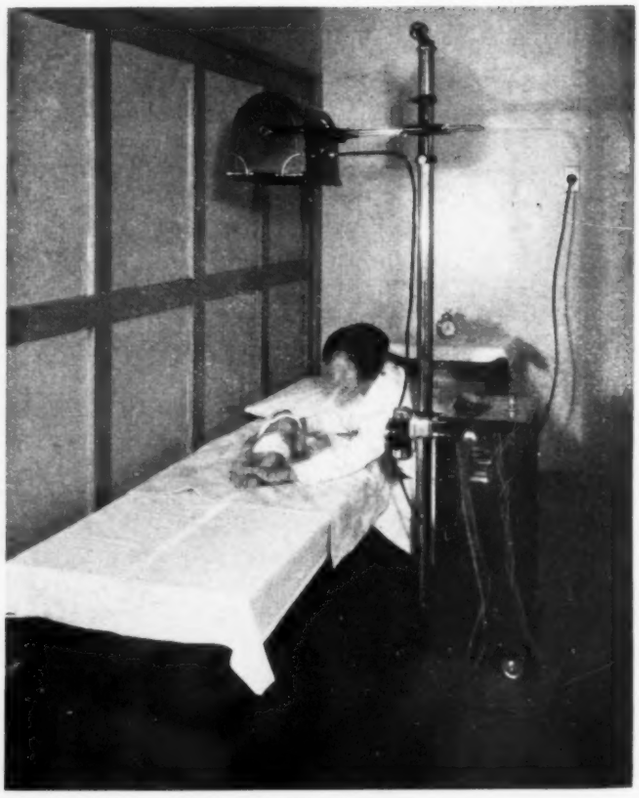
The statute does not authorize charges to be defrayed by the insurer when the injuries suffered by employees require them to remain in hospitals and when they need the services of physicians for a much longer period than two weeks. These injuries may be unusual in the sense that they do not occur under ordinary circumstances, yet they are not termed unusual cases in the statute.

Compensation is protected by the insurance company which can and does investigate each case but cannot discriminate because the Supreme Court rules that all employees are insured.

Physiotherapeutic Equipment in Different Hospitals







Above, deep therapy room at Wesley Hospital, Chicago; upper right, radiographic and fluoroscopic room, St. Francis Hospital, Peoria, Ill., lower right, ultraviolet therapy, physical therapy department, Washington Park Hospital, Chicago.

STUDIES ON HOSPITAL PROCEDURES

THE RADIUM DIVISION

IN THE preceding issue of THE MODERN HOSPITAL the organization of the radiological department and the methods employed therein were discussed. It will be remembered that this department was considered as consisting of two divisions, those of x-ray and radium. The majority of hospitals possess the former but not the latter facilities. However, as a matter of general information, and in order to complete the discussion of the use of x-ray and radium in the hospital, a description will be given here of the organization and functioning of the radium division, and a brief comment will be made upon the nature and therapeutic use of the element—radium.

Radium was first extracted from rock deposits by M. and Mme. Curie, in 1910, although the presence of some radio-active substances in uranium was announced by Professor Becquerel of Paris in 1896. Since that time it has been found that radium is present in not only all pitchblende ores, but also in minerals containing uranium.

Of course the element radium (ra.) occurs in very small amounts in these ores. For example, in ores that until recently were considered rich in radium, it requires 300 tons of carnotite—a uranium ore—to produce one gram of radium. The relative amount of radium occurring in these ores can be better understood when it is remembered that it requires about thirty grams to make one ounce.

Radium-containing ore is rather widely distributed in Nature, being found in Bohemia; in Cornwall, England; in Colorado and Utah in the United States, and in South Africa.

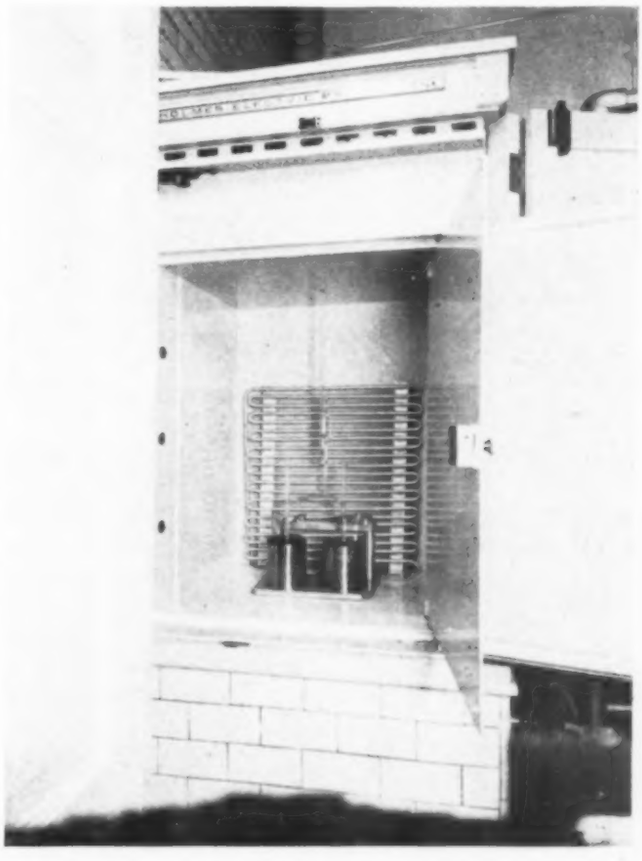
In the Colorado deposit, it has been estimated that there exist about 4,000 tons of uranium, from which may be extracted at least 1,000 grams of radium element.

The extraction of radium from ore is an exceedingly complicated process. It has been estimated that the amount of chemicals required in this extraction almost equals the quantity of ore from which the radium is to be extracted.

This process includes the crushing of the ore; its physical and chemical treatment, and finally, after many intricate and time-consuming chemical procedures have been completed, the radium remains in the form of radium bromid. Radium bromid and chlorid are the salts most commonly employed in medicine and are soluble in water, while the sulphate and the carbonate are not. The salt that is to be used is often chosen from the standpoint of solubility. For example, the insoluble sulphate is employed in tubes, toiles and plaques, while soluble preparations are used when the gas is to be extracted by means of a vacuum pump. It is of interest to all hospitals to know that the recently discovered ores in South Africa are rich in radium, only about fifteen tons of which are required to produce one gram of the element. The price of radium, as a result of this latter discovery, has fallen considerably during the past year. Whereas heretofore the price has averaged about $100,000 a gram, radium now can be purchased for about $70,000 a gram.

Because during the past half decade the therapeutic use of radium has been rapidly increasing, hospitals everywhere are being urged by their medical staffs to procure a greater or smaller amount of this element.

From an economic standpoint, it is much less expensive for a hospital to own its radium than to buy emanation (radium gas), or to rent radium



Lead-lined safe, containing radium in a weak hydrochloric acid solution. The water coils shown in the picture are employed to keep the inside of the safe cooler than the outside.

from commercial companies furnishing this service. The current price now being charged for radium emanation is about seven dollars a millicurie, which is equivalent in strength to one milligram of radium. If emanation, or radium element, is not available, ofttimes the institution is requested to purchase several tubes of radium. These may vary in amount from ten to fifty milligrams each.

RADIUM REQUEST CARD

DATE WANTED ..... TIME ..... PLACE .....

FORM OF APPLICATOR .....

NO. OF TUBES ..... STRENGTH PER TUBE ..... MC.

NAME OF PATIENT .....

DATE FILED ..... ORDERED BY .....

NO. TUBES USED ..... STRENGTH { PER TUBE ..... MC. / TOTAL ..... MC.

FOR ..... HRS. ..... MIN. AREAS: DOSAGE ..... MC. HRS.

RETURNED:—DATE ..... HOUR .....

It can be seen that even the purchase of radium in these comparatively small amounts would require the expenditure of a considerable sum of money, each milligram costing about seventy dollars. It may be here stated that radium emanation decays at a rather uniform speed, losing its radio-active powers completely in about thirty days.

When a hospital has secured any of this element the superintendent keenly feels the responsibility of protecting his institution from the loss of this valuable substance. Brief mention, then, concerning some of the methods which have been found efficient for the storage and protection of radium appears justifiable.

Now, when a hospital possesses radium in the amount of one or more grams, the institution usually employs the radio-active gas, which may be extracted from the radium element in solution by means of a vacuum pump.

The fact that radium continues to give off this active gas over an indefinite period of time, without any visible loss in its own ability to produce more gas, is but one of the wonderful properties which it possesses. Indeed, radium appears to be one of the few elements that furnish, without our understanding why, unlimited, and what almost approaches perpetual energy.

Professor Soddy, of Oxford University, in delivering a lecture concerning the properties of radium, stated: "If a half gram of pure radium bromid were divided equally among every human being at present alive in the world, and one such portion were returned to us, it would prove sufficient to be recognized by the electroscope with the greatest ease."

The radio-active properties of this element, in the light of the above statement, may be better understood when it is again recalled to you that a half gram of radium is equivalent to the one-sixtieth part of an ounce. The radium watches, which are sold at moderate prices, possess their phosphorescent properties because a very minute amount of radium has been added to zinc sulphate, with which the face of the watch is treated, thus producing the property of being visible and legible in the dark.

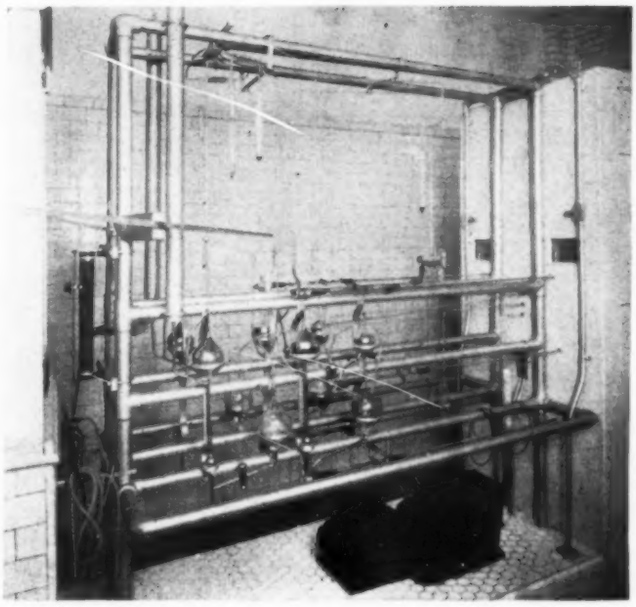
As a matter of interest, it may be mentioned that the great increase in the use of radium products during the war, for the illumination of rifle sights, watch faces, etc., caused a rapid rise in its price from seventy dollars per milligram, in 1912, to one hundred dollars per milligram in 1916.

Energy Supplying Properties

In further explanation of the energy supplying properties of radium, it has been estimated that one gram (fifteen and two-tenths grains) of radium, is capable of giving out 133 calories of heat per hour, and that this element diminishes in the radio-active ability only 4 per cent every 100 years. In other words, if a hospital were to possess a gram of radium, it would continue to furnish radio-active emanations that could be used for therapeutic purposes for at least 2,500 years.

Several measures may be adopted to protect the hospital against the loss of its radium supply. If the emanation is being used, the loss of the tube containing this gas is of but little moment, because the hospital's radium is daily producing more of this gas. If, however, the element itself is being employed, ofttimes accidents happen which prove not only embarrassing to the hospital but a distinct financial loss as well.

The radium is usually kept in a lead-lined safe



An apparatus for pumping radium emanation from the radium in solution.

in the office of the superintendent, and whenever physicians desire to use these tubes a system of requisition and receipt is inaugurated, so that the person responsible for the safety of the radium at any one time can be determined.

As will be set forth later, a procedure covering the time during which radium is being applied to the patient, is carefully worked out, and a card, frequently red in color, is attached to the patient's gown or bed, to denote to those about him the nature of his treatment. Even when every precaution has been taken, ignorant or otherwise non-understanding patients have been known to remove the adhesive strip holding the tube in place, and to throw it in waste containers, or even down slop holders or into toilets. Some distressing, and yet ofttimes ludicrous accidents have happened along this line. In one teaching hospital, a tube containing $20,000 worth of radium was lost. Advertisements were inserted in the newspapers, and a thorough search was made for this capsule, which was approximately two inches long and three-eighths of an inch thick. Finally, one day a student came into the office of the hospital and inquired the nature of a curiously shaped tube, which he had found on the campus and which he had been carrying in his pocket for a number of days. The results were much relief on the part of the hospital and a painful, though not serious, burn on the student's body.

The electroscope is a valuable aid in the search for lost radium. No matter whether the coal pile, or the traps of an institution's plumbing system are suspected of being the lodging place of the radium, this instrument will unerringly reveal its presence.

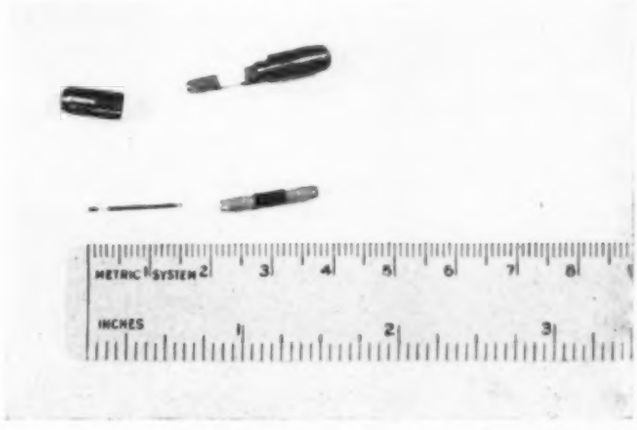
Some hospitals feel that it is necessary to insure their radium against loss. For example, the cost of insuring two grams of radium, costing about $150,000, would amount to from eight to ten thousand dollars a year. It can be seen from this statement that the protection of radium, when it is possessed in considerable amount, is an expensive matter.

One hospital owning two grams of radium and employing a vacuum pump to remove the emanation, has placed it in a safe and has inclosed this safe in a burglar-proof wooden shell, which is in turn electrically connected with a detective office in the city. There are three combinations on this safe, and three officers of the hospital, each knowing his own combination, but not the combination intrusted to the others, must be present whenever the safe is opened. This institution does not feel that it is necessary to carry insurance on its radium. The detective agency's fees amount, in this instance, to about twenty-five dollars a month.

The radium contained in the above-mentioned safe is in solution, and the safe does not need to be opened at more frequent intervals than twice a year, at which time water is added to the flasks containing the radium.

It may be of interest to add a few words here in regard to the methods of preparing and transporting the radium emanations from the physical laboratory, in which the element is kept and its gas withdrawn, to the wards and clinics of the hospital, where it is to be employed in the treatment of disease. The gas is withdrawn from the element by means of a mercury pump, and placed in capillary tubes, which vary in length from fourteen millimeters (two-thirds of an inch) to three millimeters (one-eighth of an inch) and have a caliber of about the thickness of the wire of a large safety pin.

Each day emanation which is equivalent to



A capillary tube of radium emanation, silver capsule containing emanation tube, and a cervical applicator, used in treating patients suffering with cancer of the uterus.

125 milligrams of radium, may be secured from each gram of element. This emanation, after being placed in capillary tubes, is then measured for strength, and is placed in the type of applicator or container that is desired by the physician using it. These tubes are now transported to the wards or clinics in a lead-lined box, which is supported by three chains, so that it may be held at a distance from the body of the person carrying it.

When this emanation reaches the physician, he employs it in the treatment of disease by one of three methods:

Radium may be applied to a diseased area at a distance, somewhat in the manner adopted in the use of x-rays; it may be applied to the surface, or a cavity of the body; or it may be implanted into the tissues being treated.

It can be seen that the preparation or use of radium is not a simple process, and that skilled workers must be at hand, who are trained in exact laboratory methods, both from the standpoint of measurement, and of preparation of this element for clinical use.

Organization of Radium Division

As has been intimated in an earlier issue of this magazine, it is necessary for the organization of this division to consist of a well equipped physical laboratory and a clinical department, in which physicians and other workers are especially trained in the use of this important but always more or less dangerous element.

The physicist in charge of the physical laboratory must have one or more technicians, a glass-blower and a technical mechanic, to aid him.

The clinical department may exist as a separate staff of the hospital, or any member of the visiting staff may be permitted to use radium. The former arrangement is probably the better one for the hospital that possesses a sufficient amount of radium and is of such size as to justify this type of organization.

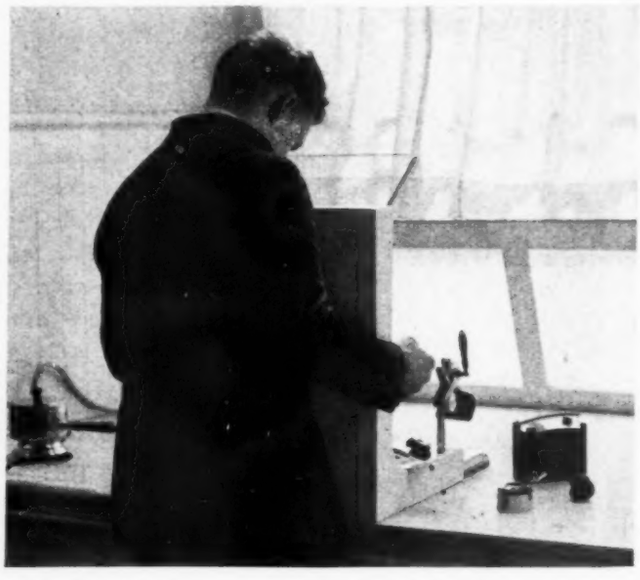
If the latter arrangement exists, then requisition is made by members of the staff upon the superintendent, if the radium itself is being employed; or upon the physical laboratory, if the emanation is being used, for a certain amount of radium or its emanation prepared in a definite way, to be applied at a fixed time. Above is shown a form that may be used for this purpose.

If there exists a separate staff for the handling of radium it is customary for this group of physicians to be organized, with a chairman who presides at the stated staff conferences. These should consist of the presentation of cases, showing the results obtained from the use of radium in the treatment of disease.

Furthermore, a resident physician who is responsible to the staff for the application and removal of radium, with interns, nurses and orderlies, complete the organization of this clinical division.

It is a wise plan for the radium division to include within its organization a physician who is skilled in treating patients by means of deep x-ray therapy, since it has been found that some conditions yield more readily to x-ray than to radium, and vice versa.

In addition to the organization outlined above, it is necessary for the hospital which aims to do efficient work in the treatment of selected patients



L-shaped lead protector for the body of the technician preparing radium emanation applicators for treating patients.

with x-ray and radium, to conduct an out-patient clinic.

This clinic should meet daily and should have referred to it all patients who have had radium applied in the wards or who have undergone x-ray treatment in the hospital. The clinic, of course, should have facilities for social service follow-up.

Conditions Treated with Radium

It is not true, as many people may suppose, that radium is used only in the treatment of cancer and other malignant tumors, although it finds, perhaps, its greatest use in the treatment of these conditions. Early cancer, particularly that of the skin surfaces, appears uniformly to yield to the application of radium. But it is also employed in the treatment of unsightly tumors that are not malignant, such as birthmarks, and other benign tumors of the face. Radium is of particular use in the treatment of certain of the serious blood diseases, in uterine hemorrhages, and a number of other conditions too numerous to mention.

It is sufficient to say that radium has been found of therapeutic use in enough diseases so that no hospital equipment is complete unless it has radium in its own possession, or has access to this element when the need for its use arises.

Dangers of Radium

The dangers of radium may be discussed under two headings, namely, danger to the patient, and danger to those handling radium.

Some most distressing accidents have occurred, in which patients have been allowed to remain under the effects of radium for too long a period of time, or in which the radium applicator has become displaced, and the tissues not under treatment have been exposed to its rays.

It is a curious fact that the patient feels no effects of the radium during treatment, but that after a varying period of time, ranging from two days to two weeks, these effects become apparent. They consist of, first, (if applied to the skin), a reddening and itching, similar to an ordinary severe sunburn; if a deeper impression has been made, this process may be characterized by ulceration, sloughing, and the loss of a considerable amount of tissue.

Those using radium must be schooled, almost to the extent of military precision, as to the protection of the patient being treated with radium. An alarm clock is often placed at the patient's bedside, set to ring at the conclusion of the desired period of treatment.

It has been stated that the patient's bed is marked with a danger card, and the patient is strictly cautioned against touching the applicator with his hands, or moving it in the slightest degree. The nurse must be trained in regard to the deleterious effects of radium, not only from the standpoint of the patient being treated, but also from the standpoint of those handling it.

The effects upon radium workers are ofttimes first manifested in a scaliness of the skin, about the fingernails. Radium has also a serious effect upon the reproductive system, as well as upon the blood elements (corpuscles). This action probably does not consist of a destruction of blood corpuscles so much as in an inhibition of the work of the bone marrow and spleen, where these cells are produced. Radium workers are required to have a full blood count done at least monthly, and should a reduction in the white blood cells, or any change in the other elements, be noted, the person in question is withdrawn from the business of handling radium until his blood condition returns to normal. These workers ofttimes, if overexposed to radium, complain of headache, fatigue, nervousness, dizziness or menstrual disorders. Usually after a period of a month or two these symptoms disappear, and the worker may continue his or her usual employment.

The hospital using radium must use every precaution to protect its technicians and other workers in this division. Within the past few years a number of suits have been instituted in the courts to recover damages from companies extracting radium, for real or supposed injury, suffered by employees handling this element.

Precautions in Handling Radium

The following precautions are usually recommended: that those handling radium or exposed to its rays be not required to work more than six or seven hours a day; that Sundays and two half days a week off duty be spent as much as possible out of doors; that an annual vacation of one month, or two separate vacations of two weeks each, be allowed.

In order to avoid injury to the fingers, the radium, whether in the form of the salt or emanation, should always be handled with forceps, and should be carried from place to place in a long handled box, or a box supported by chains, as mentioned above.

All procedures in the handling of radium should be carried out as quickly as possible, and the exposure of the person doing this work cut to the minimum.

The radium when in use should be kept in a lead-lined container, the lead not being less than eight centimeters thick. Thin rubber gloves may be worn to further protect the hands, and the room in which the radium emanation is being pumped from the radium should be supplied with an exhaust fan.

In the room in which the emanation is being withdrawn, the operator should be protected from exposure to radium rays by a lead-lined shield, behind which he stands while manipulating the pump. An L-shaped lead-lined shield may be employed to protect the worker in handling radium tubes while making applicators.

Finally, as was stated in the discussion on the use of x-ray, a dental film, carried in the pocket of the operator for a couple of weeks, will indicate the amount of exposure to which he is subjected.

Hospital awnings seldom last more than three years, because of the weathering of the fabric. The engineer of a New York hospital made several experiments which proved that paint is of value in lengthening the life of the canvas by several years. He paints the tops of the awnings green and the under side white, applying two coats of paint for each side. This provides a protective covering for the fabric.

Editorials

THE LABORER AND HER HIRE

THE time was when the relationship of the physician to the nurse was that of a kindly and understanding elder brother; when there was always a mutual, healthy respect each for the place and the attainments of the other; when the doctor in but rare and unrepresentative instances humiliated the nurse, by public criticism of either her motives or her technique; when the nurse considered the doctor her guide and the patient's savior. But this fine partnership in the combat against disease has in too many instances fallen on evil days and ways.

The doctor has gradually awakened to the fact that the nurse has come to resent any implication that she is, in any degree, his handmaiden; that she is not capable of independent thought, and that her profession is not one which has something of a line of cleavage from his. The doctor cannot understand why he has not a right to indicate his opinion, not only of the nurse's technique, but also of her salary, her hours, and the type of case that she shall accept.

Here and there, one hears an expression of opinion by a nurse or a physician, relative to the other, which certainly does not reflect an observance of either the Golden Rule or the First and Greatest Commandment. THE MODERN HOSPITAL sincerely deplores this state of affairs, chiefly because it does not augur well for the welfare of the sick man or woman, whose cause this magazine will continue to champion.

One point at issue appears to be whether the average physician, when he decries the five to seven dollars per day fee of the graduate nurse as excessive, has taken into consideration either her average total annual income or the financial demands to which she is subjected. Moreover, even if the physician has carefully weighed these matters, there are those who feel that it is not his prerogative to control the fee of the nurse. It is held by many that the nurse, by virtue of her relationship to the patient, has in reality entered into a contract to which she and the sick man or woman alone are parties. Whether this be true is not of so much importance as the fact that certainly nothing can be gained by employing invective and acrimonious comment as a means of adjusting the mutual relationships of doctor, nurse, and patient, which of late seem to have gotten out of joint.

Whether an average income of from one thousand to twelve hundred dollars a year is excessive, or even sufficient to meet the physical needs of a professional woman of today, we shall leave our readers to judge.

Mayhap, if a close scrutiny were made of the charges of the x-ray specialist, of the laboratory worker or of the basal metabolist, a disproportionate recent increase in fees would be discovered. The nursing expense to the patient is not inconsiderable, 'tis true, but it is just one of the many financial outlays to which the sick man is subjected.

And so THE MODERN HOSPITAL welcomes the initiation of the studies of the Committee on the Grading of Nursing Schools, because here at last one finds informed representatives of all groups, who are willing to sit down together, and diligently seek, not only the reason for the difficulty but the remedy as well.

Perhaps the answer will be found in further developing the group nursing idea; maybe it will come from a reorganization of nursing curricula, to educate the private duty nurse first, with an added period for the nurse aiming at a specialty; perhaps in the more general conduct of nurses' registries by a governing board on which the doctor and the nurse are equally represented, with the deciding vote vested in a business man or woman; or even by registries supervised by nurses alone. Such well organized and conducted directories might do more than has been accomplished heretofore not only to bring together the supply and the demand, but even to adjust the personality and training of the nurse to the peculiarities and desires of the patient.

Whatever the solution, it is hoped that personalities and friction between these fine professional groups may be once and for all time eradicated.

MAY DAYS

IN THE month of May are found a number of days and weeks that are nationally designated as devoted to the furtherance of some worthy object—Child Health Day, National Hospital Day, Boys' Week, Public Health Day and Better Homes Week are but a few of these. The observance of National Hospital Day should direct the attention of the people to one of their most valuable assets—the well conducted community hospital.

This year, Child Health Day had its fourth national celebration. On May 1, all over this land —in schools, churches, women's clubs, industries and labor groups, hospitals and medical societies —the cause of the child was urged.

The aims of this annual celebration are expressed in the Child's Bill of Rights, as set down by the Honorable Herbert Hoover:

"That there should be no child in America that has not been born under proper conditions; that does not live in hygienic surroundings; that ever suffers from undernutrition; that does not have prompt and efficient medical attention and inspection; that does not receive primary instruction in the elements of hygiene and good health."

None can dispute that here are expressed the minimum requirements in so far as the rights of the man and woman of tomorrow are concerned. And it is in the child of preschool age that the greatest preventive good can be accomplished. Then not only may protection against diphtheria and scarlet fever be ensured, but careful medical examination often discovers remediable defects, the correction of which obviates serious handicaps later in life.

There was a time in the life of every cardiac cripple, who is such a familiar occupant of the hospital's medical wards, when much could have been done to prevent the damage that in adult life became irremediable.

There is no other community agency that should more positively or understandingly participate in the proper observance of Child Health Day than the hospital. There is no other organization that can do more to fulfill its objects. For by providing the child, at the time of its birth, with the favorable conditions that the modern hospital offers, and by continuing this supervision in the nutrition, cardiac, and other institutional clinics, much can be done to guarantee to the country's future citizens their moral, if not legal, birthrights.

WHY SUCCESS ATTENDS A. C. OF S. MEETINGS

THE phenomenal success of the sectional meetings of the American College of Surgeons is worthy of consideration. For seven years this organization has covered all parts of the United States and Canada annually with a series of sectional meetings, carrying a broad, practical two-day program into each unit.

This program is unique, inasmuch as it has a local setting and is therefore more likely to adhere closely to practical lines of thought and discussion. It stimulates universal interest in each unit through bringing a practical message to the various groups—lay and professional. This is done through a three-fold program consisting of (a) clinics and scientific papers through which the medical profession may add to its store of knowledge; (b) hospital sessions of round table conferences, general discussion and demonstrations to stimulate hospital interest and assist in the solution of everyday problems troubling hospital executives, trustees, medical staffs, and others; (c) community health and hospital meetings for the education of the public along lines of better health and hospitals.

All these objectives are going over well, and increasing interest is manifested through the larger audiences coming to these meetings each year. A noticeable feature at present is the increasingly large number of trustees in attendance. Generally, one-third at least of the hospital audience is made up of trustees, and this is as it should be, for the trustee group has a grave responsibility in the activities of the hospital. At these meetings they can get firsthand information on the solution of many of their problems. One of the officials of the college recently inquired of a number of trustees why they attended these meetings in larger numbers than other types of meetings. The reply invariably was that at these meetings more than at any others, they were given an opportunity to express their opinion on questions at issue, to present problems, and through spontaneous discussion were able to gain much valuable information. The present type of program of the American College of Surgeons is rather unique, as there are no set papers but a presentation of many problems that are constantly confronting the hospital field. In connection with the general discussion of these problems practical demonstrations are held, making the entire program more effective.

TALKING IT OVER

A PLAN of procedure, railroad-timetable-like in its precision, often removes lost motion, and makes results more certain. Some superintendents each evening jot down in their plan book the problems that the morrow must solve.

Again, if the superintendent, although personally active and progressive, is unable to bring all of his intramural departments into coordinated and accurately timed effort, the progress of the hospital's work is impeded, backfiring results, and the institution is likely to suffer damage because of overheating. Proper carburation and accurate timing are functions which when supplied by the superintendent guarantee smooth and efficient running of the hospital machine.

* * *

THERE are so many places at which the hospital may touch upon public health that those who are endeavoring to foster this movement suffer from what our Gallic friends term an *"embarras de richesses."* Dental hygiene would seem to be an appropriate place at which to begin. It is estimated that the United States uses about forty million tooth brushes each year. If it is assumed that the

average tooth brush is worn out in six months, this means that only about twenty million persons out of a population of approximately one hundred and ten million practice the daily tooth brush drill.

Viewed in another way, it might be deduced that there are ninety million people in this country who almost never clean their teeth. From 75 to 95 per cent of the children in the public schools are found to have decayed teeth, in fact, dental defects outnumber all their other defects combined. It is estimated that from 30 to 65 per cent of normal children have defective teeth. During the war, dental defects ranked second among all causes for rejection in the selective draft. First and last, the hospital field comes into contact with an enormous number of people. If every opportunity is grasped to educate these, there is bound to result a tremendous dental improvement and an augmentation of our national health.

* * *

THE pelican has a great reputation as a fisherman. As a matter of fact he is the biggest bluffer in nature. To be sure, he catches a good many fish but not half so many as he pretends. You see him sailing along full of business. All at once, he shuts up like an old umbrella and, with a loud splash, dives into the water. He emerges, looks about complacently and gulps vigorously. You say to yourself, "He's some fisherman!" Once in a while, some doubting hunter shoots a pelican and discovers at the necropsy that the bird is as empty as last year's community chest. The moral of this stirring tale is not to bluff too consistently lest somebody take a shot at you.

* * *

IS SMOKING fire worshipping? Is this habit the result of an inherited memory? Psychologically, may the fragrant pipe, with heaven-ascending smoke wreath, symbolize the sacrificial altar? Is the effect of tobacco smoking mental as well as physical, acting not only as a toxic liberator of nervous energy but also, through subconscious memories, as a stimulant to religious fervor and exaltation? A correspondent to the *Lancet* (V.CCXI, p. 264, July 31, 1926) answers in the affirmative. At any rate, it is an interesting conjecture.

* * *

IF the hospital ambulance could tell its story, what tales of pathos and pain, of hope and joy, or even of humor, it could relate! To some the arrival of the ambulance means the advent of the dreaded moment of separation from loved ones. To many others it signifies that the door of hope for the relief of dear ones has been flung wide. And how true it is that the deportment of ambulance attendants, and even the physical appearance of the conveyance itself, establish or shake the confidence of friends and relatives in the wisdom of intrusting the safety of the sick man to the hospital.

* * *

AND what a tale of narrowly averted traffic accidents it could tell; of its rush with clanging bell through crowded city thoroughfares; of the unnecessary speed at which the rash driver forced it to travel; of ruthlessly passing red traffic signals, when no need for haste existed!

And most ambulances would without doubt consider their dignity offended, if the doctor in charge took along, just for the ride, one or more of his colleagues, or if the nurse on duty invited her friends to accompany her. And how a proud ambulance must be humiliated when it is required to haul express and groceries! For the ambulance is in reality a movable part of the hospital, with a definite purpose to fulfill in the practice of the science and art of healing, and it should favorably reflect the dignity and the humanity of the institution whose name it bears.

* * *

UPON a stone in a quiet New England cemetery there appears this inscription:

"William T. G. Morton, by whom pain in surgery was averted and annulled: before whom in all time surgery was agony: since whom science has control of pain."

To Morton, the dentist, this brief but eloquent tribute was inscribed. To Morton, the benefactor of countless millions, should go the thanks of every patient who has experienced the grateful relief from pain which his ether sleep has made possible.

* * *

A PIECE of timber and a pin were the stage properties, and some play loving French children were the actors that produced a scene that suggested to the mind of Réné T. H. Laënnec the idea of developing a diagnostic instrument which is found today in every physician's possession. Laënnec's stethoscope consisted of only a roll of paper, but he was overjoyed with the new medical world which it opened up for him.

* * *

SPEAKING of stethoscopes, have you ever noticed the varied styles in which they are worn? Some absent-minded "medicos" wear them around their neck as they would a string of stage beads. Others affect a rakish appearance by hanging the stethoscope from one ear and listening to the conversation of their intern with the other. Still others, in diagnostic abstraction, drop the stethoscope on the nearest bed or chair, and it is the nurse's job to retrieve this necessary instrument when it is next needed.

* * *

MOREOVER, that hoax of college days, of filling the stethoscopic bowl with water and watching the eyes of the victim bulge as he hears at the other end the bubbles and squeaks of some never-before-described condition, is still good for a laugh for everybody but the victim.

Callow sophomores—*horribile dictu*—still sometimes enlist the services of an imprisoned fly to secure the same effect.

* * *

DO YOU ever get "fed up" with your job, your home and your entire environment? Do you ever wish that you could disappear, take a new name and start afresh, freed from all your present responsibilities? In other words, don't you sometimes hanker for liberty? Of course you do. Sooner or later everybody who is not a vegetable or a grub is filled with an intense longing "to shatter it to bits and mold it nearer to the heart's desire." But would we really be happier? Would we not straightaway collect unto ourselves a new environment with just as many irksome responsibilities as before, and would we not again develop the same symptoms of indigestion of the ego? Everybody has these attacks; that's why tourist agencies flourish, theatres abound and publishers print travel, adventure and other fiction books. A trip, a movie, a book, these all take us mentally out of our environment

The Modern Hospital Reading Course: Lesson V

WHAT ARE THE ADVANTAGES OF AN ORGANIZED MEDICAL STAFF?

By C. W. Munger, M.D., Director, Grasslands Hospital,
Valhalla, N. Y.

CLOSE combination of a group of forces and functions is necessary to provide proper care for the patient in the present day hospital. Few will gainsay the statement that the medical division of this combination is the most important. Nursing is vastly necessary, of course; it and several other forces are essential to the hospital as we know it, but in the last analysis the medical staff is the firm foundation upon which the detailed hospital structure must rest.

Since the medical organization and work is fundamental, it must needs be sound. A sound and smoothly functioning medical staff is seldom to be found in a hospital whose executive officer is not fully cognizant of the medical problems, and who does not work sympathetically with the medical group. Much of the calumny which has been heaped upon the heads of superintendent and staff alike, has been the result of a lack of this essential mutual understanding. It is believed that, more often than not, the lack of insight is evidenced by the medical group rather than by the hospital executive. Nevertheless, the present series of articles is intended to instruct its readers in hospital administration. It is, therefore, expedient that the aims and procedures of the latter group be pointed out, the student being reminded that it is occasionally the superintendent's duty tactfully to instruct members of his staff in the fundamental theories of relation between staff and hospital.

Mutual Understanding Essential

No part of the executive's work will require more tact than his relations with the medical staff. The executive who does not heed this warning may do untold harm to his hospital. However, the superintendent who constantly squabbles with his staff is probably incompetent. Medical men, while temperamental at times, are highly trained in the art of reasoning. Problems properly presented will be justly decided. The superintendent who has "service to patients" as his watchword will find only sporadic opposition among his staff, and the staff committees will prove to be just tribunals for the consideration of medical matters.

An organized staff is just as necessary in an "open" as in a "closed" hospital. Perhaps the former may be said to have the greater need. No hospital worthy of the name can exist without more or less concerted action upon the part of the medical men using it. The organized staff provides a means of performing the following functions necessary to all hospitals:

1. Periodical review of the medical work and its results.
2. Maintenance of proper medical standards.
3. Transmission of opinions and needs of the medical workers to the superintendent and through him to the board of trustees.

Many other functions may, of course, be assumed by the staff. Those given above are considered fundamental and indispensable.

Who Shall Appoint Staff?

The authority or board that assumes final responsibility for the hospital should alone have the power of appointing the medical staff. In the private hospital, this group is usually called the board of trustees. In the public institutions the board or commissioners having control is the proper appointing power. The actions within the hospital of the members of the staff affect the object of the hospital, namely, the healing of the sick. The hospital belongs to the board of trustees and that board is morally or legally responsible for all that transpires within the institution. The board cannot, therefore, fulfill the responsibility placed upon it unless it may control the men who perform the most important work in the institution.[1]

It is, perhaps, needless to say that the board of trustees must, in order to make a wise selection for staff vacancies, have medical consultation. With this assistance boards are usually able to make wise appointments. It is a fact, though paradoxical, that an intelligent lay group when wisely counselled can make a better job of selecting a medical staff than could a board of physicians, who are likely to be influenced by personal or professional relations with the candidates.[2] The exact mechanics for selection of staff members should be outlined in the staff constitution.[10]

The types of staff organization are many. They vary according to function of hospital, size of staff and a dozen other factors, not to mention

the personal beliefs and prejudices of members of the staffs and boards. These variations are, in general, advantageous. It would be unwise to expect that a single form of organization would suffice for all hospitals, knowing as we do how much they vary in aims and facilities.

For a general hospital of reasonable size the following points should be borne in mind by those who plan the staff organization:

a. Officers: There should be a chief officer, vice-chief and a secretary.

b. Medical Board: Such a board should consist of the chief of staff and the superintendent ex-officio, and several other members of the staff. This board should handle much or all of the business of the staff. Members of the medical board, excepting the ex-officio members, should serve for a period of years, with no more than two terms expiring in any one year. The superintendent must be the liaison officer between staff and board of trustees. All recommendations of the medical board to the trustees shall proceed through him.

c. Clinical Departments: The staff should be divided into as many departments as are consistently represented in the work of the hospital, provision being made for the addition of departments when necessary. Many staffs have found it convenient to establish certain major divisions, such as the departments of medicine, surgery and obstetrics. Under each of those departments as many sub-divisions are created as may be necessary. For instance, the department of surgery may include: division of general surgery; division of urology; division of anesthesia; division of orthopedics; division of otolaryngology and others if needed.

Officers of departments may be necessary for group meetings and for handling the work of the departments.

d. Rank: In larger hospitals differences in rank are usually desirable. In a hospital with an out-patient department the ranking might be: assistant attending physician, O. P. D.; attending physician, O. P. D.; assistant visiting physician, wards; visiting physician, wards; consulting physician.

It is seldom possible to generalize in such matters, but suffice it to say that precedence in the staff should be so planned as to give every patient the skilled treatment he deserves. The staff must also provide a schooling for the younger men who are later to assume the positions of responsibility.[3] The importance of attracting and training the younger men of promise cannot be over-emphasized.

Advancement to higher rank should be upon a just basis. Length of service should be considered, but rules should be sufficiently pliable to permit recognition of efficiency and special ability. A retirement age is advisable.

A compilation of the basic duties and privileges of the staff is quite necessary. It should clearly define general principles and should be approved by the board of trustees before becoming effective. It is recommended that those interested study the staff constitutions of as many hospitals as possible.

Recent writers have been nearly unanimous in urging long periods on service for staff members. All have seen the disadvantage to the patient of frequent changes of method of treatment, as well as the loss of continuity of interest in the patient and knowledge of his case.

The ideal situation would be without doubt a year-round period of service on all divisions.

Suggestions for Collateral Reading

Lapp and Ketcham, "Hospital Law." Choice of Staff Members, pages 398-402.

Lapp and Ketcham, "Hospital Law." Reports and Record Keeping in Hospitals, pages 446-485, inclusive.

Chapman, Frank E., "Hospital Organization and Operation," chapter 3, "The Medical Staff," pages 91-101, inclusive.

Cushing, Harvey, "The Life of Sir William Osler."

American Hospital Association Proceedings, 1924-1926, inclusive. Papers and Discussions Relating to Medical Staff Matters.

American Hospital Association Bulletin No. 129, "A Summary of Principles of Hospital Organization."

Staff Constitutions Recommended for Study

Bridgeport Hospital, Bridgeport, Conn. Published 1920.

Blodgett Memorial Hospital, Grand Rapids, Mich. Published 1924.

Michael Reese Hospital, Chicago, Ill. Published 1921.

Collection of Constitutions and By-Laws of the Hospital Library and Service Bureau, 22 East Ontario Street, Chicago.

Certain it is that modern standards can never be maintained with rotations every one or two months, as formerly practiced. The only real disadvantage of continuous service is the lessening of the number of physicians who may take advantage of hospital training. Even in the cities, scarcely one-fourth of the practicing physicians are able to obtain hospital appointments.[3] Continuous service would lessen this percentage. The hospital contemplating it should weigh the relative values to its community of the two plans. Some hospitals have found it desirable to put chiefs of services on continuous duty, their subordinates rotating semi-annually. This latter is probably as close an approach to rotation service as is permissible. Were it not for the obvious value to the public health of giving hospital training to as many medical men as possible, only a completely continuous service would be defensible.

Staff Meetings

The staff should meet not less than once each month. Active sub-divisions should meet oftener. The American College of Surgeons[4] has admirably outlined the procedure for staff meetings. This outline should be accepted as a minimum and elaborated where desirable. The superintendent should attend all meetings of the general staff. He will do well to present a report regularly and discuss frankly with the staff and medical board all medical administration problems. His presence and readiness at any time to discuss or defend his policies will help to prevent misunderstanding of his administration and will dissolve the petty or selfish opposition so likely to develop. As has been stated, the superintendent who is "for the patient" need have no fear of the judgments of large groups of the medical profession. He must, of course, be tactful; be willing to admit a mistake if he has made one; must play the game fairly; and, above all else, must not show personal favoritism to any staff members.

Staff Members Appointed for One Year

Attendance to ward duties and at staff meetings is a true index of the value of a staff member and should be considered when he is up for reappointment. The letter of appointment from the board of trustees should clearly define what is expected in the matter of attendance. As most boards appoint the staff for one-year periods only, it is always possible to eliminate promptly the man who is too busy or who lacks the interest to do his duty. Most hospitals have a "form of acceptance" requiring the appointee to agree not to split fees, to attend regularly,[11] etc. Such an annual declaration keeps the physician reminded of the responsibility he has assumed in this connection.

The American College of Surgeons in its standardization of hospitals[5] has wisely given "Medical Records" a most prominent position among its requirements. There is no clearer index of the efficiency of the medical service than the records which it keeps. The hospital must help by providing interns, clerks, and statisticians to handle the mechanics of record keeping. No record system is complete, however, without the active direction and interest of the attending physician. It is the function of the staff to review the records and to censure the head of a service whose records are not up to standard.

Superintendents in small hospitals have found it most difficult to induce their staffs to assume this responsibility. Where necessary, it is the duty of the board of trustees to compel the staff to take proper cognizance of record keeping. Even a "weak-kneed" board can justify its stand upon the fact that approval by the American College of Surgeons will otherwise be withheld. Signing of each record by the attending is a reasonable requirement; affixing of his signature will be taken seriously and will encourage him to see that the record is properly made.

Relations with Resident Staff

The resident staff is a part of the superintendent's organization, and smooth running of the institution requires recognition of this fact. For the work on the wards, however, the intern or resident must be directly responsible to the attending, subject to the rules of the hospital. This relationship should be clearly outlined in written form to each new appointee to the resident staff. Dismissal of any member of the resident staff is a function of the superintendent. He should, however, within the limits of justice let the resident staff realize the dignity and the medical authority of the attending physician. A staff advisory committee on interns may be desirable. Its function should, however, be advisory only, the superintendent maintaining the same relation to the resident staff as to other departmental employees.

Active work in the training of interns is a duty of every attending doctor. There is often difficulty in getting him to assume the rôle. The attending who requires least of the intern, teaches him least, and is seldom rewarded by either the gratitude or respect of the intern. As a group, interns are likely to retain for several months a classroom attitude. They expect to be required to do their duty and have not yet accustomed themselves to doing good work merely for the sense of personal satisfaction engendered. The attend-

ing doctor has a wonderful opportunity for service to his profession in acting as guide and mentor to these men upon whom the future of the medical profession rests. The advantage does not all accrue to the intern and to posterity; the doctor who teaches constantly broadens his own knowledge and vision.

Teaching of Medical and Nursing Students

Most hospitals have training schools for nurses. The staff physician plays an important rôle in the instruction of the student nurse to whom he seems a demigod. The example he sets and the technique he follows will be observed and copied. His responsibility is often greater than he realizes. As a rule there is no difficulty in interesting him in supporting and assisting the training school.

The wards of teaching hospitals are utilized for the instruction of medical students. Abuse of patients seldom occurs. It must be guarded against, however, by the administration. The hospital routine is considerably disturbed by the presence of students, but the stimulus to medical efficiency imparted by the teaching atmosphere outweighs this disadvantage.

The term "open" applied to a hospital indicates that any legally recognized physician may practice therein. By "closed" we mean that the hospital admits to practice only a certain selected group of men. In actuality, all degrees of "openness" are encountered in the hospitals of the country; almost all have some sort of safeguard against the unprincipled or incompetent physician.

There has in the past been much argument concerning the respective advantages of the two systems.[6] The more advanced thinkers in hospital administration have favored the closed staff. From the point of view of development of medical efficiency within the hospital, they are undoubtedly right. The smaller and more specialized the staff, the more readily may the hospital routine be fitted to it. A large number of doctors of varying ability, each having his own ideas as to hospital procedure, greatly complicates the administrator's problem of fitting his organization to their needs. Open hospitals are made efficient with much greater effort than closed hospitals.

The above facts prove that from the administrator's viewpoint the closed staff is preferable. The hospital, however, does not exist for the benefit of its superintendent, but for the good of its patients and humanity in general. The value to public health of giving every doctor access to a hospital, cannot be denied, provided only it be a good hospital. The American Medical Association's statistics[3] indicate that in 1920, 66.1 per cent of hospitals answering their questionnaire were open. In 1924, the proportion had increased to 83.1 per cent. The trend is apparently toward the establishment of more open staffs.

The building within late years of many small community hospitals in the rural districts probably accounts for the change in percentage. Certainly few metropolitan hospitals have left the ranks of the closed. Here, perhaps, is an inkling of the proper answer to the question: a system suitable to a community hospital is not necessarily the right one for an institution on New York's east side, and vice versa.

It is provedly possible for an open hospital, with

List of Questions for Review

1. What are the principal advantages to patient, to hospital and to staff member in having an organized staff?
2. What, if anything, may justify a member of the resident staff in failing to carry out an attending physician's order?
3. Enumerate arguments in favor of a closed staff; an open staff.
4. Outline the "mechanics" of a desirable method of selection and final appointmen of staff members. What is the usual term of appointment?
5. Make a schematic outline of a staff organization for a 300-bed hospital with complete out-patient department, giving departments, sub-departments and ranking of the different men concerned.
6. What persons should be ex-officio members of the medical board?
7. What are the duties of attending physicians in connection with medical records in a small hospital without resident medical staff; in a large hospital with ample medical staff?
8. How may free use of consultations be stimulated?
9. Why are medical research and medical teaching valuable to hospitals who engage in them?
10. If the superintendent thinks a staff member is not doing proper medical work, to what person or persons should he complain and in what order?

proper safeguards, to be run efficiently and with justice to the patient. It is undeniable that the closed hospital can develop satisfactory medical service. In view of all facts, however, the board of trustees of each hospital must make its own decision in the matter. Local medical conditions, economic considerations, the wishes of those supporting the institutions, and above all the welfare of the general public must control the decision. It is possible to have a successful hospital, in either case. Regardless of whether a hospital be open or closed, it is imperative that a uniformity of procedure be established to the end that there may be a uniformity of function among the doctors using the hospital.

The asking and granting of consultations between members of the staff should be encouraged to the utmost.[8] Every medical man should subscribe to this principle. The utilization of the specialist must not be overlooked. The staff member who seldom requests consultation is probably lacking in diligence for his patient's welfare, as well as in ability. Monthly compilations of consultation statistics are a safeguard and a stimulus.

The board and superintendent should extend all possible facilities to staff members interested in doing high grade research work.[7] Laboratory, ward and financial facilities should be extended to such men. The medical board or a similar group should pass upon each proposal of this nature, so as to eliminate work and expense which gives no promise of valuable results. Research problems are sometimes enthusiastically entered upon, only to be forgotten when the work grows tedious.

The closest possible contact should be maintained between the laboratory divisions and the staff. The doctors should be encouraged to stop daily to hear reports, see specimens and discuss cases. They should visit the x-ray or electrocardiograph departments for personal consultation with the expert in charge. The pathologist or roentgenologist who thinks he is saving time by giving only written reports to the staff, is not doing his best for the welfare of patients and hospital. Within limits, these service departments should welcome orders for new work or requests for assistance, even suggesting new work to the staff member when possible. The laboratories should be looked upon by the doctor as the most important adjunct to his work, as service stations adequate to give real service. While foreign to the subject, it should be mentioned here that the system pursued in many hospitals of making individual charges for every laboratory test or x-ray procedure, must surely have lessened the medical efficiency of institutions that do this.

It is a mooted question whether the hospital exists because of the staff or the staff because of the hospital. Whatever the answer, the fact remains that the interests of the two are so intertwined that neither can be successful without the other. Both must make sacrifices for the common good and each must try to realize the problems of the other. Success is certain if the watchword of both be "For the Good of the Patient."

References

1 Moorhead, Louis D., "How to Organize Hospital Medical Service." Hospital Management, July, 1919.
2 Goldwater, S. S., "The Hospital and the Surgeon." Transactions A. H. Assn. 1916, pp. 463-484.
3 Sanger, Homer F., "Hospital Facilities and the Medical Profession in the United States." THE MODERN HOSPITAL, May, 1925.
4 American College of Surgeons' Bulletins (past 10 years).
5 American College of Surgeons' special bulletin, "The Minimum Standard."
6 Goldwater, S. S., "The Extension of Hospital Privileges to all Practitioners of Medicine." THE MODERN HOSPITAL, April, 1925.
7 Walsh, James J., "Research and Obligation of the Hospital Profession." Hospital Progress, May, 1925.
8 Chapman, Frank E., "Hospital Organization and Operation," page 97.
9 Chapman, Frank E., "Hospital Organization and Operation," page 105.
10 Chapman, Frank E., "Hospital Organization and Operation," page 94.
11 Constitution and By-Laws of Blodgett Memorial Hospital, Grand Rapids, Mich.

DOES THE INTERN NEED PRACTICE IN THE OUT-PATIENT CLINIC?

In discussing the importance of the out-patient department in the clinical training of the graduate medical student, at the recent Congress on Medical Education of the American Medical Association, Dr. George F. Shambaugh, Chicago, made the following statement:

"The out-patient clinic is the place where most of the problems in clinical medicine are first encountered. It is therefore the one place where advanced clinical training for the first or fundamental year in preparation for a special practice can best be provided. The key to proper clinical instruction in any special field is to make the student an actual clinical assistant who shares, so far as his training and ability permit, in the responsibility of the department. It is essential for the development of efficient service in the out-patient clinic that it be provided with a suitable corps of graduate students serving as clinical assistants, comparable to the services of interns in the hospital.

"Naturally the carrying out of such a program means that the out-patient clinic must be properly housed and provided with an equipment that represents as nearly as possible an ideal equipment. The staff for directing the work should include men imbued with the spirit of investigation in order that they may instill this spirit in the graduate students and help them to pursue by the methods of research the clinical problems that are constantly presenting themselves."

COURTESY OVER THE TELEPHONE

A western hospital has made itself known as a "friendly place," largely through its attention to telephone calls. Superintendents know how many calls come in each day and how anxious most of the people are who make inquiry concerning some relative or friend. This hospital has realized that this is the time to treat people the most carefully in order to make a good impression.

NEWS OF THE MONTH

INTERN AND STAFF APPOINTMENTS DISCUSSED BY OHIO SUPERINTENDENTS

EXCELLENT attendance and marked interest characterized the meeting of the Ohio Hospital Association held at Columbus, April 4 and 5.

This was the thirteenth annual meeting of the association which is the oldest of all state hospital associations and a new scheme of sessions was held. The opening session was at noon on the first day when a luncheon was held. After luncheon the chairs were rearranged and the business of the meeting taken up. In the evening a dinner and session were also held and the following morning a breakfast, called at eight o'clock, was closely followed by the closing session. This permitted most of those attending the meeting to leave their cities early on the morning of the first day and to return on the afternoon of the second day.

The election of officers resulted in the following choice: President-elect, Carl A. Brimmer, Mansfield General Hospital, Mansfield; vice-president, Dessa H. Shaw, Memorial Hospital, Piqua; second vice-president, Sister M. Joseph, Good Samaritan Hospital, Zanesville; treasurer, Father Maurice F. Griffin, St. Elizabeth Hospital, Youngstown; secretary, Robert G. Paterson, Columbus; trustees, Arden E. Hardgrove, Akron City Hospital, Akron, and Rev. A. G. Lohman, Deaconess Hospital, Cincinnati.

The first paper presented was read by Miss Shaw on "The Value of the Woman's Auxiliary Board to the Hospital." Miss Shaw told of the work that the board of women had done in her hospital and also emphasized the importance of this board to each of the patients. Dr. Karl H. Van Norman, director, Maternity Hospital, Cleveland, Rev. A. G. Lohman, B. W. Stewart, Youngstown Hospital, Youngstown, and Mrs. Harris, a member of the women's auxiliary of the Aultman Hospital, Canton, each discussed Miss Shaw's paper.

Staff Responsibilities Outlined

One of the best papers heard at a hospital meeting in some time was given by Dr. W. W. Brand, chief of staff, Maternity and Children's Hospital, Toledo, who spoke upon the relation of the hospital staff to the organization of the hospital and the obligation of both the staff and the hospital to each other. Dr. Brand outlined the method according to which the staff at Toledo had been organized and told how the full cooperation of the contracting parties had made possible the successful relationship that existed between the staff and the hospital personnel. He stated that both had definite responsibilities, that both should work for the patient's ultimate recovery, and that all else was purely secondary. He summarized the situation by stating that the following qualities are essential: mutual sympathy, coordination, confidence in each other and absolute loyalty.

Dr. Brand's paper was ably discussed by Dr. J. H. J. Upham, Columbus, representing the American Medical Association, Father Maurice Griffin, representing the American Hospital Association in place of Dr. W. H. Walsh, the executive secretary who did not attend the meeting, and Rev. A. G. Lohman, who represented the Ohio Hospital Association.

Guy Clark, Cleveland Hospital Council, Cleveland, was the next speaker. He outlined the work that is being done by the central council in Cleveland and in response to a question discussed the possibilities and feasibility of central purchasing for the entire state of Ohio. He said that there were many things to be decided before the subject could be taken up for serious thought and outlined some of the requirements that were necessary. His paper was discussed by Mr. Stewart who told of the work that was being done by central purchasing in other places in the United States.

Hospital's Obligation to Intern Defined

Mr. Clark asked those present who were interested in central purchasing to raise their hands and three responded. Later he was asked to reword this question to "How many are interested in saving money for their institutions by central purchasing?" and the response was but eight superintendents in the state. Mr. Clark stated that inasmuch as there did not seem to be enough interest it would be better to disregard the subject at this time. However, it was recommended that a committee be appointed to study the subject.

In the evening President Hardgrove presided at a dinner and this was followed by a dance. The speakers at the dinner were the deans of three medical schools, Bertha Beecher, dietitian, Christ Hospital, Cincinnati, and F. O. Schoedinger, a trustee of Children's Hospital, Columbus.

Dr. A. C. Bachmeyer, superintendent, Cincinnati General Hospital, Cincinnati, and dean of the Medical College of the University of Cincinnati, was the first of the deans to speak. The topic assigned to all three was the obligation of the hospital to the intern. Dr. Bachmeyer was followed by Dr. E. F. McCampbell, dean of the Medical College, Ohio State University, Columbus, and Dr. C. A. Hamman, dean of the Medical College, Western Reserve University, Cleveland. Intern training, the selection of interns, the assignment of interns and other problems that hospitals face and interns also must help to solve were discussed by these three men.

Miss Beecher read a paper that had been prepared by Alice P. Thatcher, superintendent, Christ Hospital, Cincinnati. Miss Thatcher was detained and Miss Beecher, who was presiding at the dietitians' meetings, was assigned the task of reading the paper. She dwelt upon the function of the board of trustees and its place in hospital administration and presented the subject from the standpoint of a superintendent. Mr. Schoedinger who has been a trustee of Children's Hospital, Columbus, for the past

twenty-five years and who has been president of his board for a great many years, discussed the same subject from the trustee's point of view. His remarks were exceptionally well received and their authenticity was apparent, inasmuch as they were based upon his long experience with philanthropic work.

Following the breakfast session on the second day Mary A. Jamison, superintendent, Grant Hospital, Columbus, presided and Mary E. Yager, superintendent, Maternity and Children's Hospital, Toledo, acted as the chairman of a round table. There were five assigned subjects and the question box yielded three more. Laboratories and laboratory service for non-hospital patients was discussed first by Carl A. Brimmer. Frank E. Chapman, director, Mount Sinai Hospital, Cleveland, discussed physical therapy, mostly from the standpoint of the advisability of purchasing the necessary equipment. Mr. Krumm, Cleveland, discussed the various kinds of insurance needed in the average hospital. Dr. C. S. Woods, superintendent, St. Luke's Hospital, Cleveland, discussed occupational diseases and Dr. E. R. Crew, superintendent, Miami Valley Hospital, Dayton, discussed the regulation of orderlies' time.

The round table was followed by a business session with the reports from the various committees. It was decided to add a publicity committee to the list of committees for the purpose of considering publicity for hospitals upon a statewide basis.

Dr. Crew, the new president, took the chair. He was one of the originators of the association and this is his second term of office as president, he having acted in that capacity in 1915.

The meeting adjourned promptly at twelve o'clock on the second day and it was voted to have been the most successful of the meetings that this organization has held.

NEW YORK TO HAVE NATIONAL CANCER CENTER

A center for the New York Cancer Association has been obtained through the recent purchase of the Hudson Towers Hospital, Seventy-second Street and West End Avenue, New York. The hospital, which was purchased at a cost of $3,500,000, will be opened, it is announced, this summer as a National Cancer Hospital.

According to present plans, the cancer center will include a 400-bed hospital, a clinic capable of caring for 500 patients daily, extensive research and educational facilities to carry forward the prevention and public educational work of the association. The association plans an immediate drive to raise $5,000,000 with which to pay for the building and the equipment that will be needed.

The building contains twenty-four floors, all of which will be used by the center, the three top floors to be occupied by the laboratories. From the seventeenth to the twenty-first floors will be given over to patients' quarters. The center will be open to all cancer patients, according to Sanders A. Wertheim, president of the association.

GRACE HOSPITAL PUBLISHES INTERESTING REPORT

Grace Hospital, New Haven, Conn., has again issued an annual report that merits commendation for its artistic appearance and straightforward manner of setting forth the accomplishments of the hospital during the past year.

The hospital's story, according to the report of the president, is one of transition, reorganization and progress. Economy and efficient administration have somewhat relieved the acute financial situation of 1925, the books showing a net gain of nearly $29,000 for the year 1926. The superintendent's report is concise, and touches on all points of interest in the general running of the hospital without going into wearisome details. It is shown that the buildings have been improved, the accounting system altered in the interests of accuracy and efficiency and the personnel of the business and nursing departments enlarged. The hospital's insurance situation was surveyed during the year and as a result the rates on a one-year basis have been reduced from forty cents and six mills a hundred to thirty-four cents, and on a three-year basis from one dollar and one cent and six mills to eighty-five cents.

In view of the emphasis now placed on the autopsy percentage of hospitals, it is noteworthy that during 1926 Grace Hospital had forty-one autopsies, as against thirteen in 1925.

This is a forty-eight page pamphlet, printed on good paper, well illustrated and attractively bound.

The superintendent of Grace Hospital is Joseph J. Weber, formerly editor of THE MODERN HOSPITAL.

WESTERN RESERVE MEDICAL CENTER TO BE EXPANDED

Plans for the expansion of Western Reserve University Medical School, Cleveland, include the building of several hospitals to supplement the facilities already in existence and complete the medical unit. The institutions of the group will all be affiliated with the medical school for teaching purposes but will have their own boards of trustees and endowment funds.

The proposed hospitals include a new 250-bed Lakeside Hospital to be eight stories high. This will be used for research as well as for housing patients. A new Rainbow Hospital will be erected at a cost of $350,000 to be devoted to housing convalescent children. The program also includes the building of a new nurses' home.

The pathologic institute, for which the Rockefeller Foundation has granted $750,000, is to be started soon.

NEED GREATER BED CAPACITY

The need of 8,100 additional beds in the 114 Catholic Hospitals in the United States and Canada was indicated in the results of the recent survey made by the Catholic Hospital Association. The survey covered 260 Catholic hospitals. The cost of the additions was estimated at $40,000,000.

UNIVERSITY OF WISCONSIN TO HAVE NEW LABORATORY BUILDING

The University of Wisconsin, Madison, Wis., is constructing a building on the medical campus as a service memorial and institute for medicine and hygiene. The building will be a memorial to citizens of the state who served in the World War.

The new medical building will connect by corridors with the Wisconsin General Hospital and will provide quarters for the state laboratory of hygiene, the laboratory of the state board of health, for bacteriology, physiologic chemistry and other sciences, the medical library, lecture and recitation rooms and shops.

INDIANA CONSIDERS THE EVILS OF WASTE AT ANNUAL MEETING

FIFTEEN exhibits of hospital supplies, a good attendance and many local entertainments were the features of the meeting of the Indiana section of the American Hospital Association, held at Evansville, April 7 and 8.

Dr. M. F. Steele superintendent, Methodist Episcopal Hospital, Fort Wayne, president of the association, was reelected for another term and Robert E. Neff, administrator, Indiana University Hospitals, Indianapolis, was elected president-elect of the association. Missouria Martin, superintendent, Muncie Home Hospital, Muncie, was appointed executive secretary of the association and Gladys Brandt superintendent Cass County Hospital, Logansport, was elected treasurer; Eva Milburn, superintendent, Putnam County Hospital, Greencastle, and Dr. William M. Reser, St. Elizabeth Hospital, Lafayette, were elected vice-presidents and the following trustees were elected: A. G. Hahn, Deaconess Hospital, Evansville; Mrs. Ethel P. Clarke, Indiana University Training School for Nurses, Indianapolis; Dr. C. N. Combs, superintendent, Union Hospital, Terre Haute; Robert E. Neff, Indianapolis, and Dr. Anderson, Reid Memorial Hospital, Richmond.

Following the invocation and address of welcome and the response, Dr. Steele delivered his presidential address in which he outlined the work that had been done by the association and the work that remained to be done during the coming year. The reading of the reports of the various committees was deferred until the business session which was to be held later.

Department Heads Must Cooperate

An excellent paper on the coordination of the hospital administration and the department heads was read by Clarence H. Baum, superintendent, Lakeview Hospital, Danville, Ill. Mr. Baum stressed the importance of thorough understanding and cooperation between each department from the janitor up to the president of the board of trustees. His paper was most complete and was discussed by several of the members of the association. Mr. Hahn, Miss Brandt and many others commented upon the points that Mr. Baum had brought up.

The members of the association were entertained at luncheon by the Optimist Club of Evansville, at which time John A. McNamara, executive editor, THE MODERN HOSPITAL, Chicago, and the Rev. Newton E. Davis, of the Board of Methodist Hospitals and Homes, Chicago, spoke upon the relation of the hospital to the community.

Dr. Joseph C. Doane, medical director, Philadelphia General Hospital, Philadelphia, and president-elect of the American Hospital Association, was the first speaker at the afternoon session. He took for his subject "Waste" and dwelt upon the waste of time and of opportunity in the hospital rather than upon the wasting of materials and food. His paper was one of the outstanding features of the sessions and was discussed by Dr. James Y. Welborn, superintendent, Walker Hospital Clinic, Evansville and by Mr. Neff. Dr. Welborn also presided at this session.

Dr. G. E. Mills, Boehne Tuberculosis Sanatorium, Evansville, read a paper on "The Sanatorium," in which he outlined the workings of the tuberculosis sanatorium at Evansville and the progress that was being made to stamp out this disease in that part of the state. His paper was well discussed by several of those present.

One of the subjects not on the program in the afternoon that received much attention was that of postmortems. Many views were expressed upon the best methods of obtaining the largest number of postmortems and the most diplomatic manner of dealing with embalmers and relatives of the deceased.

The big banquet hall of the hotel was filled when the dinner was held in the evening. Many of the physicians of the city on the staffs of several hospitals attended as well as the delegates. Dr. Steele presided as toastmaster and the speaker of the evening was Dr. Newton E. Davis. He told of the work that is being done by hospitals generally and by the Methodist hospitals in the various parts of the United States. By many apt illustrations he stressed his points and sent home his message of better hospitalization. Following Dr. Davis was a costume recital by a musical group of Evansville, and the dinner ended with a few appropriate remarks by Dr. Steele. The exhibitors staged a dance in the same room, following the dinner, which lasted until one o'clock.

On the morning of the second day an address on hospital



Dr. M. F. Steele

publicity was given by Mathew O. Foley, managing editor, *Hospital Management*, and it was discussed by Dr. William A. Doeppers superintendent, Indianapolis City Hospital, Indianapolis. The second address was given by Dr. William H. Walsh, executive secretary, American Hospital Association, Chicago, who told of the work that was being done in Chicago and spoke of the forthcoming meeting to be held in Minneapolis. Dr. Combs discussed Dr. Walsh's paper and a general discussion followed.

A "Good Fellowship" luncheon was held at noon, at which time those present had the opportunity of telling some of the noteworthy experiences that they had during the past year. It was presided over by Mr. Hahn and

the chief speaker was William Shane, vice-president, Evansville Chamber of Commerce, Evansville, whose address was well received.

At the afternoon session an interesting paper on hospital fire insurance was read by W. K. Palmer, Indiana Inspection Bureau, Indianapolis. It appears elsewhere in this issue.

One of the best round tables that has ever been presented at any hospital meeting was conducted by Mr. Neff, in which many subjects were debated from a variety of angles. The meeting ended with a business session when reports were made.

Following the meeting visits were made to the hospitals of Evansville and to the laboratories of manufacturers serving the hospital field.

Friday evening at the Chamber of Commerce a public health meeting was held and was attended by the delegates. At this time both Dr. Doane and Dr. Walsh spoke. It is expected that the meeting next year will be held in Indianapolis.

CONFERENCE ON PUBLIC HEALTH HELD IN CHICAGO, MARCH 24-25

That mutual understanding of health problems by physicians and health workers is necessary for the promotion of public welfare was stressed at the recent conference on public health, held at the office of the American Medical Association, Chicago, March 24-25. The conference was called by the A. M. A. and was attended by representatives of many national health organizations of the country. Dr. Wendell C. Phillips, president, American Medical Association, New York, presided.

In his opening address, Dr. Phillips stated that the object of the conference was an understanding of the viewpoint of the various groups concerned in public health matters with the hope that methods of cooperation might be developed.

Others who appeared on the program were Surgeon General Hugh S. Cumming, Washington, D. C., who spoke on the relation of the physician to public health; Dr. Harlow Brooks, New York, who spoke on public health as a specialty of medical practice; Dr. A. T. Holbrook, Milwaukee, Wis., who spoke on the relations of the physician to public health in the small city; Homer Folks, secretary, State Charities Aid Association, New York; John A. Kingsbury, director, Milbank Memorial Fund, New York; Dr. George M. Fisher, president, New York State Medical Society, Utica, N. Y.; Dr. Matthias Nicoll, Jr., state health commissioner of New York; Dr. Linsly Williams, director, National Tuberculosis Association, New York; Dr. W. T. Leathers, professor of preventive medicine, Vanderbilt University, Nashville, Tenn.; Dr. Olin West, secretary, American Medical Association, Chicago; Dr. J. A. Ferrell, International Health Board, New York, and Barry Smith, secretary. Commonwealth Fund, New York.

NEW JERSEY HOSPITAL EXECUTIVES MEET

The New Jersey Hospital Association met on March 18 at Jersey City, N. J., and held a round table conference at which an interesting and varied program was presented. The members of the association were the guests of Dr. George O'Hanlon, medical director, Jersey City Hospital, and Mayor Hague of Jersey City. Over two hundred members of the association were present.

The following are some of the speakers and their subjects: "The Hospital and Workmen's Compensation Laws," Rev. John G. Martin, superintendent, St. Barnabas Hospital, Newark; "Special Metabolic Diets," Mrs. Margaret F. Du Boise; "Tuberculosis in the General Hospital," Dr. B. S. Pollak, medical director, Hudson County Tuberculous Hospital, Secausus; "Some Current Nursing Problems," Jessie M. Murdoch, R.N., superintendent of nurses, Jersey City Hospital, Jersey City; "The Small Hospital and Its Community," Daisy C. Kingston, superintendent, Somerset Hospital, Somerville.

SUMMER CLINICS IN CHICAGO BROADEN IN SCOPE

The Chicago Medical Society announces that because of increased facilities the 1927 summer clinics, supported by many of the largest hospitals and laboratories in Chicago, will be open to physicians from all states instead of being limited to Illinois as was the case last year. Admission will be by card issued by the Chicago Medical Society upon the payment of the fee of $10 for each two weeks' course. No physician will be permitted to attend more than one course. The first course will run June 13 to June 24 and the second from June 27 to July 8.

All physicians in Illinois will receive the schedules, and announcements will be sent to the American Medical Association and the state medical journals. Registration will be open for this excellent postgraduate work to as many as can be accommodated, in the order of registration.

Among the hospitals in Chicago that are supporting the clinics are the following: Post Graduate Hospital, Chicago Memorial Hospital, University of Illinois College of Medicine, Cook County Hospital, Michael Reese Hospital, Mercy Hospital, Presbyterian Hospital, Jackson Park Hospital, St. Luke's Hospital, Ravenswood Hospital, Mount Sinai Hospital, Francis Willard Hospital, West Suburban Hospital, Evangelical Hospital, North Chicago Hospital, Chicago Lying-in Hospital, St. Joseph's Hospital, Alexian Brothers Hospital, Laboratory of Surgical Technique, Washington Park Hospital, Chicago Municipal Sanitarium, John B. Murphy Hospital. Several of the large laboratories have also agreed to give their cooperation in this great work.

TWO NEW BUILDINGS PLANNED FOR HOSPITAL IN PHILADELPHIA

A number of unusual features will be embodied in the new maternity and administration buildings for the Jewish Hospital, Philadelphia, the ground for which was recently broken. The maternity building will face toward Broad Street, with the administration building immediately behind, and will connect with the present building. Both will be in the Tudor style of architecture.

The maternity building will be six stories high and will contain 192 beds. It will have a facade 206 feet long. While the building will be used primarily for maternity cases it will contain several departments, such as the x-ray and small operating rooms, diet kitchens and storage rooms to supplement those in the present building. The roof will contain a large glass enclosed room and open pavilions. The administration building will house the usual executive offices and record and file rooms.

A special effort has been made to overcome an institutional appearance, by designing an octagonal foyer on each floor from which the corridors will radiate. The octagon is to be wainscoted with marble of warm tones and

is to have restful and homelike furnishings to provide comfortable sitting rooms for visitors and convalescents. Particular attention has been paid to the lighting and ventilation of the buildings. Both are fireproof throughout and have soundproof flooring. All stairways are enclosed with fire retardant screens. Horace W. Castor, Philadelphia, is the architect.

DR. SCHWARTZE TO HEAD MELLON INSTITUTE FELLOWSHIP

Mellon Institute of Industrial Research, University of Pittsburgh, has announced the appointment of Dr. Erich W. Schwartze as head of the recently established multiple industrial fellowship on cooking utensils.

The purpose of the fellowship is to make a comprehensive study, along the most approved scientific lines, of the effects of the corrosion of metallic cooking utensils upon the metal, as well as the effect upon the food, the results to be published from time to time.

Dr. Schwartze is a specialist in food research and will be assisted by Frank J. Murphy, a junior industrial fellow of the institute.

MISSOURI, KANSAS AND OKLAHOMA ASSOCIATIONS TO MEET IN JOINT SESSION

The Missouri Hospital Association will hold its fifth annual meeting at Kansas City, Mo., May 27 and 28, in joint session with the Kansas Hospital Association and the Oklahoma Hospital Association. It is planned also to invite the hospitals of Iowa and Nebraska to meet with these three associations at that time, thus bringing



Dr. B. A. Wilkes

together five middle western states, with a view to the possibility of eventually forming a mid-western hospital association.

Many exhibits of an educational and scientific nature will be displayed at this meeting and an admirable program has been planned. Among the subjects to be discussed are the grading program of nursing schools and the position occupied by the small hospitals in their respective communities. The following are some of the speakers: Dr. May Ayres Burgess, R. N., New York; Dr. M. T. MacEachern, American College of Surgeons, Chicago; Dr. Rush E. Castelaw, Kansas City, Mo.; Rev. R. D. S. Putney, St. Louis, and Dr. L. H. Burlingham, St. Louis. Social features will include a theatre party and an automobile tour, when visits will be made to various hospitals.

Dr. B. A. Wilkes, superintendent, Missouri Baptist Sanitarium, St. Louis, Mo., is the president of the association and will preside at the various sessions.

COMMITTEE MAKES SUGGESTIONS FOR NIGHTINGALE BIRTHDAY

The American Hospital Association has prepared a bulletin on National Hospital Day which it has distributed to the members of the association and in which suggestions for the observance of the birthday of Florence Nightingale, May 12, are set forth. Many newspaper releases, ideas for the reception of visitors, radio talks and other means of interesting the community in the hospital have been prepared and are to be found in the pamphlet.

A committee on publicity was formed recently and it was from this committee that the suggestions were obtained. Emphasis this year is centered on the fact that no funds are to be collected on National Hospital Day and the hospitals observing it are asked to refrain from connecting fund raising with the observance in any way whatever.

As usual, a certificate is offered for the hospital presenting the best evidence of the day's observance both by publicity obtained in newspapers and by photographs of the celebration.

SOUTH DAKOTA ORGANIZES ASSOCIATION

Twenty hospitals were represented at a meeting at Huron, S. D., on March 1, to organize a state hospital association for South Dakota. Dr. R. L. Murdy of Lincoln Hospital, Aberdeen, acting as temporary chairman, outlined the reasons for a state association and gave an interesting talk on "Live Hospital Problems."

The following officers were elected: President, Dr. F. E. Clough, Homestake Hospital, Lead; vice-president, Sister Flavia, Sacred Heart Hospital, Yankton; secretary, D. L. Braskamp, Lincoln Hospital, Aberdeen; and trustees, Elmer Anderson, Luther Hospital, Watertown, and Dr. R. L. Westaby, New Madison Hospital, Madison.

The first convention of the new association will be held at Huron on May 2.

OHIO DIETETIC ASSOCIATION MEETS

The Ohio Dietetic Association held an interesting annual meeting on Tuesday and Wednesday, April 5 and 6 at the Neill House, Columbus, at the same time that the Ohio Hospital Association was holding its thirteenth annual meeting.

The morning was devoted to committee meetings and to registration and this was followed by a luncheon at which Charlotte Hopkins, Grant Hospital, Columbus, delivered an address of welcome. Bertha E. Beecher, dietitian, Christ Hospital, Cincinnati, gave the response.

The afternoon session started promptly at 2 p. m., at

which time Miss Beecher presided and papers were read on the following topics: "Selling Your Point of View"; "Vitamins in Diets For the Sick"; "The Dietary Department From the Viewpoint of the Hospital Superintendent." Later a tea was given by the members of the Columbus Dietetic Association.

Business started on the second day directly after breakfast with a committee round table. This was followed by two papers and some discussion, and ended with a business session when the reports of the committees were read.

NEW YORK ASSOCIATION OFFERS LIVE PROGRAM

The program for the forthcoming meeting of the Hospital Association of New York State, to be held at Syracuse, May 26 and 27, has been formulated and gives promise of a live and interesting meeting.

The morning session on the opening day will be taken up largely with committee reports presented by the chairmen of the various committees, followed by discussions. The afternoon program on that day will deal with nursing topics, the report of the nursing committee being given by Dr. William L. Wallace, president, Crouse-Irving Hospital, Syracuse, N. Y., and papers on "The Nurses' Curriculum" by Janet M. Geister, R. N., secretary, American Nurses Association, and "The Hospital and the School of Nursing" by a speaker whose name is not yet announced.

The morning session on the second day will be opened by a paper on "The Relationship of the Superintendent and the Trustees" by Charles F. Neergaard, New York.



John R. Howard, Jr., who will conduct the round table.

A round table will follow this, conducted by John R. Howard, Jr., superintendent, New York Nursery and Child's Hospital, New York. This will include discussion of such questions as: Should visiting committees report defects to the superintendent or the trustees? How can economy in the use of linen and surgical supplies be attained? How often should a fire drill be held? What concession is made in providing hospital care to doctors in the community? How long sick leave is allowed hospital employees? How long vacations?

At the afternoon session hospital labor turnover will be discussed by Jacob Goodfriend, assistant superintendent, Montefiore Hospital, New York, and hospital personnel relationships by another speaker.

COMING MEETINGS

American Association of Hospital Social Workers.
President, Mrs. Charles W. Webb, Lakeside Hospital, Cleveland, Ohio.
Secretary, Lena R. Waters, Hospital of the University of Pennsylvania, Philadelphia.
Next meeting, Des Moines, Iowa, May 11-18, 1927.

American College of Surgeons.
President, Dr. W. W. Chipman, Montreal.
Director General, Dr. Franklin H. Martin, 40 E. Erie St., Chicago.
Next meeting, Detroit, Mich., October 3-7, 1927.

American Dietetic Association.
President, Florence Smith, St. Mary's Hospital, Rochester, Minn.
Secretary, Anne Boller, Riverside, Ill.
Next meeting, St. Louis, Oct. 17-19, 1927.

American Hospital Association.
President, Dr. R. G. Brodrick, University of Stanford Hospitals, San Francisco, Calif.
Executive secretary, Dr. William H. Walsh, 18 East Division Street, Chicago.
Next meeting, Minneapolis, Minn., October 10-14, 1927.

American Occupational Therapy Association.
President, T. B. Kidner, 175 Fifth Avenue, New York.
Sec.-Treas., Eleanor Clarke Slagle, 175 Fifth Avenue, New York.
Next meeting, Minneapolis, Minn., Oct. 10-14, 1927.

American Psychiatric Association.
President, Dr. Geo. M. Kline, Department for Mental Diseases, State House, Boston.
Secretary, Dr. Earl D. Bond, Philadelphia.
Next meeting, Cincinnati, Ohio, May 31-June 3, 1927.

American Medical Association.
President, Dr. Wendell Phillips, 40 West 47th St., New York.
Secretary, Dr. Olin West, 535 North Dearborn Street, Chicago.
Next meeting, Washington, D. C., May 16-20, 1927.

American Physiotherapy Association.
President, Gertrude Beard, Wesley Memorial Hospital, Chicago.
Secretary, Ida M. Hozenhyer, 2900 Mildred avenue, Chicago.
Next meeting, Washington, D. C., May 16-18, 1927.

American Protestant Hospital Association.
President, Robert Jolly, Baptist Hospital, Houston, Texas.
Secretary-treasurer, Rev. Frank C. English, Christ Hospital, Cincinnati.
Next meeting, Minneapolis, Minn., October 8, 9, 10, 1927.

British Hospital Association.
Next meeting, Norwich, England, June 23-24, 1927.

Catholic Hospital Association.
President, Rev. C. B. Moulinier, 124 Thirteenth street, Milwaukee, Wis.
Secretary, Sister M. Philomena, 124 Thirteenth street, Milwaukee, Wis.
Next meeting, Milwaukee, Wis., June 20-24, 1927.

Hospital Association of the State of Illinois.
President, Dr. Paul W. Wipperman, Decatur and Macon County Hospital, Decatur.
Secretary, Joseph F. Miller, Methodist Hospital of Central Illinois, Peoria.
Next meeting, Chicago, May 5-6, 1927.

Hospital Association of New York State.
President, Dr. George B. Landers, Highland Hospital, Rochester, N. Y.
Secretary, Edgar C. Hayhow, New Rochelle Hospital, New Rochelle.
Next meeting, Syracuse, May 26 and 27, 1927.

Minnesota Hospital Association.
President, Margaret Rogers, St. Luke's Hospital, St. Paul.
Secretary, Donald C. Smelzer, Charles T. Miller Hospital, St. Paul.
Next meeting, Duluth, June 24 to 25, 1927.

Missouri Hospital Association.
President, Dr. B. A. Wilkes, Missouri Baptist Sanitarium, St. Louis.
Secretary, W. J. Grolton, Missouri Pacific Hospital, St. Louis.
Next meeting, Kansas City, May 27-28, 1927.

National League of Nursing Education.
President, Carrie M. Hall, Peter Bent Brigham Hospital, Boston.
Secretary, Blanche Pfefferkorn, 370 Seventh Avenue, New York.
Next meeting, San Francisco, June 6-10, 1927.

National Tuberculosis Association.
President, Dr. Henry Sewall, Denver, Colo.
Managing Director, Linsly R. Williams, 370 Seventh Avenue, New York.
Next meeting, Indianapolis, Ind., May 23-26, 1927.

New England Hospital Association.
President, Dr. Harold W. Hersey, Bridgeport Hospital, Bridgeport, Conn.
Secretary, Dr. Leslie Wright, Peter Bent Brigham Hospital, Boston, Mass.
Next meeting, Boston, Mass., May 5 and 6, 1927.

South Dakota Hospital Association.
President, Dr. F. E. Clough, Homestake Hospital, Lead.
Secretary, D. L. Branskamp, Lincoln Hospital, Aberdeen.
Next meeting, Huron, May 2, 1927.

Wisconsin Hospital Association.
Rev. H. L. Fritschel, Milwaukee Hospital, Milwaukee.
Executive Secretary, H. K. Thurston, Jackson Clinic, Madison.
Next meeting, Milwaukee, May 23 and 24.

Personals

CATHERINE E. OWENS, R.N., formerly superintendent of Sheltering Arms Hospital, Athens, Ohio, is the new superintendent of Bellevue Hospital, Bellevue, Ohio.

DR. G. A. ROOSE has been appointed acting head of the Central Clinic and Hospital, Salem, Ohio, succeeding the late Dr. H. K. Yaggi, president.

DR. A. H. SMITH, medical director and superintendent, Livingston County Sanatorium, Pontiac, Ill., has resigned to locate in Ontario.

DR. W. LANGSTON is the new superintendent of the State University Hospital, Oklahoma City, Okla.

E. E. HANSON has succeeded INGEBORG SPONLAND as the superintendent of the Lutheran Deaconess Hospital, Chicago. Miss Sponland has gone to China.

KATHARINE BROWN, R.N., for several years superintendent of the Bryn Mawr Hospital, Bryn Mawr, Pa., has been appointed superintendent of the Jeanes' Memorial Hospital, Fox Chase, Philadelphia.

DR. CYRUS C. STURGIS, Harvard University, has been appointed director of the Thomas Henry Simpson Memorial Institute of Medical Research of the University of Michigan Hospital, Ann Arbor, Mich. Dr. Sturgis will also have the title of professor of internal medicine.

MARY A. MORRIS, who for the past four years has been superintendent of Richard's Hospital, Port Deposit, Md., has resigned to go to Florida.

SISTER M. HUBERTINA, formerly superior at St. Mary's Hospital, Columbus, Nebr., succeeds SISTER M. HERMANA as superior at St. Francis Hospital, Colorado Springs, Colo. The latter has been transferred to St. Mary's Hospital, Columbus, Nebr.

AMELIA K. COLLINS has resigned as superintendent of the Paintsville, Ky., hospital.

MAUDE BROKOW has resigned as superintendent of the Bellevue Hospital, Bellevue, Ohio.

JOHN S. MCCONNELL, formerly superintendent, Samaritan Hospital, Philadelphia, is now superintendent of the Newcomb Hospital, Vineland, N. J.

RUTH I. STRINE, formerly of the Maryland Tuberculosis Sanatorium, State Sanatorium, Md., is superintendent of the Etowah County Tuberculosis Sanatorium, Gasden, Ala.

M. ELLEN MCINTYRE has resigned from the superintendency of the Yonkers Homeopathic and Maternity Hospital, Yonkers, N. Y.

DR. GEORGE T. BASKETT, superintendent, Willmar State Asylum, Willmar, Minn., has resigned to become superintendent of the Pennsylvania State Hospital, Wilkes-Barre. He will be succeeded by DR. B. F. SMITH, for the past five years assistant superintendent, St. Peter State Hospital, St. Peter, Minn.

DR. J. WALTER LAYMAN has been appointed in charge of the South Boston General Hospital, South Boston, Va.

CONSTANCE MAGNUSON succeeds MARGARET FAY as director of the school of nursing of the Swedish Hospital, Brooklyn, N. Y. Miss Magnuson was formerly with the University of Michigan Hospital, Ann Arbor, Mich.

ABBIE I. PORTER, formerly director of nursing service at the Cleveland Clinic Hospital, Cleveland, is now superintendent of the institution.

SISTER PATRICIA is the new superintendent of St. Mary's Hospital, Duluth, Minn.

C. Q. SMITH is the new commissioner of the Methodist Hospital, Fort Worth, Tex., succeeding DR. W. H. MATTHEWS.

DR. L. E. EMANUEL, Chickasha, Okla., is the new president of the Oklahoma Hospital Association, taking the place of PAUL FESLER who has gone to the University of Minnesota Hospital.

DR. J. F. NORRIS, formerly assistant superintendent of the State Hospital for the Insane, St. Peter, Minnesota, has joined the staff of the Pennsylvania State Hospital, Wilkes-Barre.

HOWARD C. SMITH has been appointed superintendent and MRS. HOWARD C. SMITH matron, of the new Kings County asylum for the harmless insane, Nova Scotia, which is to open soon.

EVA ARMOUR is the new superintendent of Hale's Hospital, Quebec, succeeding MARY SHAW who recently resigned to be married.

SYLVIA REISS has been appointed temporary superintendent of West Hudson Hospital, Kearney, N. J., to fill the place of MRS. LULU G. WILKINS who died of blood poisoning. MRS. WILKINS had been superintendent since March 1, succeeding ANN RADL.

DR. HUGH HEATON has resigned as superintendent of the Malden Hospital, Malden, Mass. No successor has been appointed as yet

SISTER MARY VERONICA is the superintendent of Mercy Hospital, Chicago, succeeding SISTER MARY DE PAZZI who has become a member of the staff of Misericordia Hospital, Chicago.

VIVIAN E. MINCK, R.N., a graduate of St. Joseph's Infirmary, Fort Worth, Texas, and formerly of the Virginia St. Hospital, Graham Texas, is the new superintendent at the Angelina County Hospital, Lufkin, Texas.

MARY E. HENRY, for the past nine years superintendent, Pottstown Hospital, Pottstown, Pa., has accepted the superintendency of the Washington County Hospital, Hagerstown, Md., succeeding EMMA M. GLOVER.

ADAH H. PATTERSON, formerly superintendent, St. Luke's Hospital, St. Paul, Minn., is now superintendent of the Children's Orthopedic Hospital, Seattle, Wash., succeeding W. L. WEGHING, R.N.

ANNA C. PHILLIPS has been appointed associate director of field service of the American Public Health Association. Miss Phillips was formerly associated in health and hospital surveys with Dr. Haven Emerson, professor of public health administration, Columbia University, New York.

CHARLOTTE E. DUNNING is the new superintendent of the Jamaica Hospital, Long Island, N. Y. Miss Dunning was formerly superintendent of the Cleveland Clinic Hospital, Cleveland, Ohio.

ETHEL B. KYLE is acting superintendent of Kewanee Public Hospital, Kewanee, Ill.

BESSIE A. BUDD, R.N., superintendent of nurses, Yonkers Homeopathic and Maternity Hospital, Yonkers, N. Y., is now acting as superintendent of the hospital.

MANY ATTEND MEETING OF CATHOLIC HOSPITAL ASSOCIATION OF PENNSYLVANIA

SISTERS from hospitals in all parts of Pennsylvania gathered at Scranton, Pa., on April 19-20, for the annual meeting of the Catholic Hospital Association of Pennsylvania held at the Hotel Casey and the Mercy Hospital.

The meeting opened at Mercy Hospital with a mass celebrated by the Rev. J. J. Featherstone, J.C.L., diocesan director of schools, Scranton. Following this the Sisters went to the crystal ballroom at the Hotel Casey for the first series of papers. Sister M. Irenaeus, R.N., Providence Hospital, Beaver Falls, who is president of the association, presided and introduced the Rev. J. S. Fagan, diocesan administrator of the Scranton diocese who welcomed the delegates.

He was followed by the Rev. D. J. Conners, S.T.L., Scranton, who delivered an excellent paper on "The Function of the Catholic Hospital." Father Conners emphasized the importance of a definite philosophy of life and stated that this was one of the possessions that the Nuns had, as they had taken vows to foreswear worldly pleasures, devoting their lives to the healing of the sick and comforting the dying.

One of the best papers heard at any convention was read by Sister M. Laurentine, R.N., St. Francis Hospital, Pittsburgh, on "The Care of the Psychoneurotic Patient in the General Hospital." She explained that this type of patient was much more common than is supposed and that it is the hospital's duty to deal intelligently with the neurotic—particularly in postoperative cases.

Much discussion was caused by the paper on organizing the laboratory in a small hospital, read by Sister M. de Chantal, R.N., Du Bois Hospital, Du Bois. Various methods of charges, the importance of the laboratory, the salaries of pathologists and technicians and other pertinent phases of this department in both large and small hospitals, were discussed.

Develop Personality of Nurse

After luncheon Father Featherstone delivered an excellent talk on developing the personality and culture of the nurse. He emphasized the fact that the hospital is often wrongly judged by the student nurse, and that every effort should be made to see that she becomes a woman of tact and refinement and an asset to the hospital with which she was connected.

Dr. M. J. Noone, Scranton, read a paper on endocrinology, in which he outlined the important work and developments that were taking place in this phase of therapy.

Sister M. Martina, R.N., Mercy Hospital, Wilkes-Barre, outlined the method of nurse instruction by the lesson plan and generally summed up the practice in nurse training at her hospital. Her subject was discussed by nearly all of the nurse instructors present and was followed by a talk by the Rev. E. F. Garesche, S.J., Milwaukee, Wis., who, instead of dealing with his assigned topic, complimented Sister Martina with a continuation of her topic.

The session ended with a talk by John A. McNamara, executive editor, THE MODERN HOSPITAL, Chicago, who discussed each paper that had been presented and reviewed the progress that has been made in the hospital field.

A round table was held at Mercy Hospital in the evening. Sister M. Regina, R.N., B.S., conducted it, and many problems of nurse training and discipline were brought up. Sister M. Etheldreda, R.N., M.A., Mercy Hospital, Pittsburgh, led the discussion.

On Wednesday a trip to College Misericordia, Dallas, was enjoyed. The only speaker at the Wednesday morning session was the Rev. J. P. Boland, D.D., diocesan director of hospitals, Buffalo, N. Y., who read a paper entitled "Keeping Religion in the Catholic Hospital."

The following officers were elected: President, Sister M. Regina, R.N., B. S., Mercy Hospital, Wilkes-Barre; first vice-president, Sister M. Illuminata, St. Agnes Hospital, Philadelphia; second vice-president, Sister Carmeleta, Du Bois Hospital, Du Bois; third vice-president, Sister M. Louise, St. Joseph Hospital, Pittsburgh; secretary, Sister M. Avellina, Mercy Hospital, Scranton.

COMMITTEE ON THE GRADING OF NURSING SCHOOLS ISSUES QUESTIONNAIRE

The Committee on the Grading of Nursing Schools, New York, in connection with its study of the alleged nursing shortage, has sent the following letter to 38,000 doctors scattered throughout the country:

Dear Doctor:

You are one of 38,000 doctors whom we are asking to report upon nursing conditions in their localities. We are attempting to reach every member of the state medical societies in Massachusetts, New York, Pennsylvania, Georgia, Louisiana, Illinois, Kansas, Wyoming, Washington, California, and to secure from these doctors and, through them, from their patients, statements as to the supply and quality of nursing service available in these states at the present time. A week in the month of March has been chosen because it represents a period when there is much sickness and when, if there is a genuine nursing shortage, it should be evident.

We are sending this material to you because we believe, if a satisfactory study of the alleged nursing shortage is to be made, that it is essential to secure evidence not only from nurses and registries, but also from the employing groups—the hospital, the patient, and the doctor. The study is being made by the Committee on the Grading of Nursing Schools, which is a co-operative committee officially representing seven national medical, nursing, and public health organizations. The personnel of this Committee is printed on the back of this letterhead.

Enclosed with this letter you will find three questionnaires. Form 1 is for you to answer. Forms 2 and 3 we should like to have you give to two of your patients who have recently had experience with nurses. We are asking the doctors to put these in the hands of their patients, so that the patients will understand that this is an important problem and will take the questionnaires seriously.

We ask your cooperation. Please send us this report and ask two of your patients to send us theirs.

(Signed) William Darrach, M.D., *Chairman*
May Ayres Burgess, Ph.D., *Director*

The three questionnaires that accompany the letter are headed: "The Doctor and the Private Duty Nurse," "The Patient and the Private Duty Nurse" and "The Patient and the Hospital Nurse." The first of these is to be answered by the doctor and relates to his experience with private duty nurses during one week. The second is to

be answered by one of the doctor's patients who has recently employed a private duty nurse, either in the hospital or at home. The third questionnaire, "The Patient and the Hospital Nurse," is to be given to one of the doctor's patients who has recently been in a hospital and has relied upon the regular nursing service and has not employed a special nurse.

When the study is finished reports of the findings will be published in the medical, hospital and nursing journals and in special pamphlets issued by the Committee on the Grading of Nursing Schools.

POSTGRADUATE COURSE HELD FOR STUDY OF TUBERCULOSIS

An intensive study of modern methods of treatment and of early diagnosis of tuberculosis was the aim of a postgraduate course and clinical conference on tuberculosis sponsored by the Berks County Medical Society, Berks County, Pa., and held from April 11 to April 20, at Neversink Mountain Sanitarium, Reading, Pa.

Eminent specialists in chest diseases gave the lectures, which covered such topics as causes of tuberculosis, activity of the disease, differential diagnosis, treatment routine for best results and special treatments. Demonstrations of typical cases were also held at the sanitarium.

The course was in charge of Dr. W. P. Brown, medical secretary of the Pennsylvania Tuberculosis Society, Philadelphia, assisted by Dr. S. B. Hertzog, superintendent of Neversink Mountain Sanitarium.

The attendance at this course was limited to ten doctors.

COOK COUNTY HOSPITAL TO RANK AS LARGEST HOSPITAL

When the buildings in course of erection at Cook County Hospital, Chicago, are completed in the near future, Chicago will be able to claim the largest hospital in the world. The institution will then have 3200 beds for patients. The London-Middlesex Hospital will rank second in capacity, with 3000 beds and the Vienna General Hospital third, with 2800 beds. A sum of about two and a half millions has been expended on the present building program.

Cook County Hospital admits more than 40,000 patients annually and between 700 and 800 postmortems are performed each year. Clinics run to nearly 2100 annually, averaging about forty a week. They are attended by about 800 students at a cost to each student of $5 for a ticket good for one year. The clinics include all varieties of medical and surgical cases.

More than 40,000 dispensary cases are treated annually and 40,000 additional cases are examined and rejected. Admissions to the hospital are about 40,000 annually, so that the total number of cases passing through the hands of the hospital attending staff is around 120,000 each year. At the beginning of this year the hospital admitted its one millionth patient, since the time, fifty-two years ago, when it was established in its present buildings.

The buildings cover an area of ten acres and with the equipment of the hospital, but not the ground it stands on, are valued at fourteen million dollars.

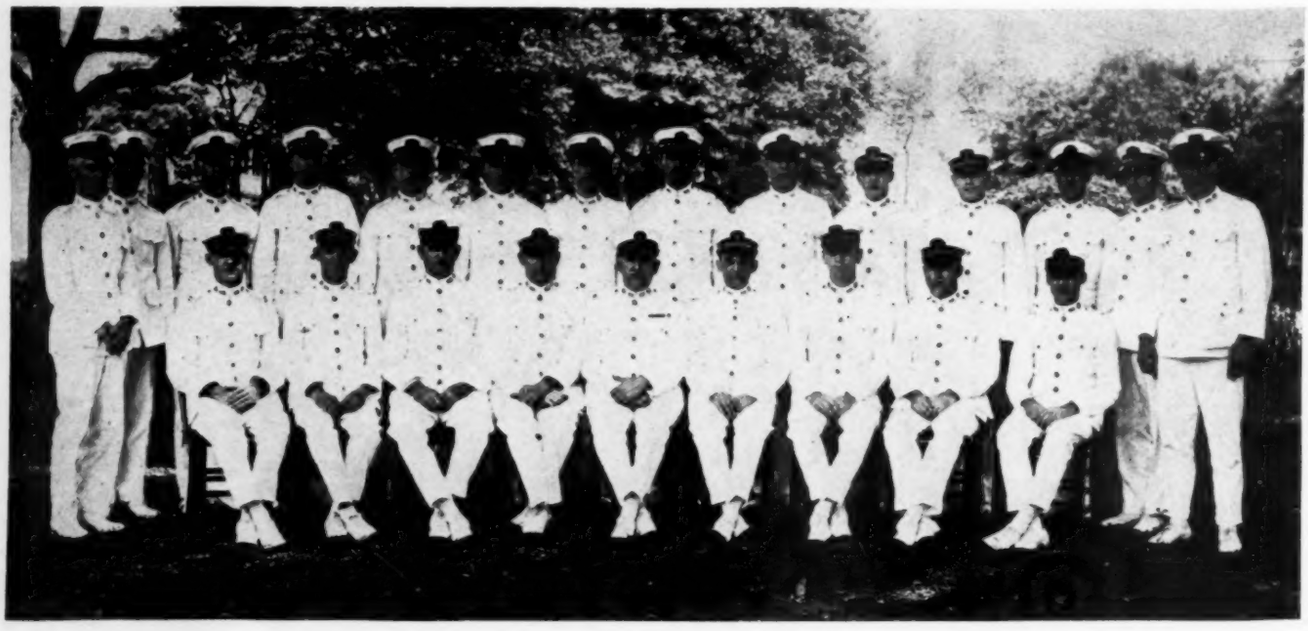
PSYCHIATRIC SOCIAL WORKERS TO MEET

The American Association of Psychiatric Social Workers will hold its first annual meeting as a separate organization in conjunction with the fifty-fourth annual meeting of the National Conference of Social Work, in Des Moines, Iowa, May 11 to 18.

NEW NURSES' HOME PLANNED FOR CHICAGO HOSPITAL

A new home for nurses, to cost about $600,000, will be erected by officials of St. Bernard's Hotel Dieu Hospital, Chicago. The new home will occupy the site of the old one which is to be torn down immediately.

There will be 175 rooms in the building, with accommodations for 150 nurses. The structure will be four stories high and will be directly across the street from the hospital. It is expected that work will start early in the summer and be completed by the first of next year.



Medical, dental and administrative officers, U. S. Marine Hospital, No. 14, New Orleans, La.

MORE LEGISLATIVE WORK URGED AT PENNSYLVANIA MEETING

A PROGRAM replete with interest, and several social functions characterized the meeting of the Hospital Association of Pennsylvania, which was held at the Adelphia Hotel, Philadelphia, on April 20, 21 and 22.

In addition to the program features of the meeting there was also a hall filled with excellent exhibits, and the members of the association, which is the largest of any state organization of hospital executives, spent much of their time visiting the booths where the wares were displayed.

Dr. E. E. Shiffersteine, superintendent, Coaldale, State Hospital, Coaldale, was elected president-elect and will follow into office Dr. H. K. Mohler, medical director, Jefferson Hospital, Philadelphia, who assumed the duties of president following the meeting. The other officers elected were as follows: May A. Middleton, superintendent, Methodist Episcopal Hospital, Philadelphia, first vice president; Sister M. Edmonda, Philadelphia, second vice president; Elmer E. Matthews, superintendent, Wilkes-Barre General Hospital, Wilkes-Barre, treasurer, and Howard E. Bishop, superintendent, Robert Packer Hospital, Sayre, trustee. No executive secretary was appointed at this time to fill the vacancy caused by the resignation of John M. Snith, superintendent, Hahnemann Hospital, Philadelphia, who has been the secretary since the organization of the association.

The meeting opened with President Bishop presiding, and by invocation delivered by the Rev. John W. Keough, University of Pennsylvania, Philadelphia. The address of welcome was given by Dr. Wilmer Krusen, director of Public Health, Philadelphia, and the response was made by Mr. Matthews. This was followed by the presidential address given by Mr. Bishop.

Mr. Bishop stressed the many services that had been carried out by the association during the past year and briefly outlined the work of the legislative committee. He said that the three objectives that had been aimed for during 1926 and 1927 had been a reduction of the inheritance tax on bequests to charitable institutions, a modification of the present compensation law that would benefit the hospitals, and legislation that would protect hospitals in liability cases where there is insurance.

The success of this program was summed up as follows: The inheritance tax on bequests to charitable institutions has been reduced from 10 to 5 per cent; progress has been made but nothing definite has been done on the revision of the workmen's compensation laws; the matter of protection in public liability cases where there is insurance was not taken up with the legislators at this time, upon advice of legal counsel.

President Bishop also took up several other interesting topics, particularly a discussion of the state welfare department, the nursing problem, standardization and hospital building. The address was one of the most comprehensive and valuable ever delivered at a state hospital meeting.

Following this address several of the committees made reports, and a short business session was held.

From four to six in the afternoon the Hospital Association of Philadelphia tendered to the visiting delegates a reception in the convention room. This proved to be most enjoyable and the success of the occasion was due to the efforts of the committee which consisted of May A. Middleton, Elsie Miller, Esther Miller, Lillian Carson, Stella Mummert, Hulda Randall, Mother M. Edmonda, Mrs. Joseph C. Doane and Mrs. John M. Smith.

The evening session of the first day was given over to an address delivered by Dr. Josiah H. Penniman, Provost, University of Pennsylvania. He was introduced by Dr. Joseph C. Doane, medical director and superintendent,

Our Monthly Round Table

Can you answer these questions discussed in this issue?

1. For what reasons should the superintendent interest himself in the health of the student nurse? (p. 49)
2. What care does the hospital owe its nurses when they are ill? (p. 52)
3. Are communities fulfilling their responsibilities toward their convalescents? (p. 57)
4. Name some reasons why those in need of convalescent care fail to get it. (p. 58)
5. What standards should guide the management of convalescent homes? (p. 60)
6. Why is it advantageous to have a combined diagnostic unit and out-patient department on one floor in a teaching hospital? (p. 68)
7. Should patient's length of stay in a tuberculosis sanatorium be limited? (p. 70)
8. Name some ways in which a tuberculous patient can protect himself. (p. 74)
9. Is it economical for a hospital to own its radium? (p. 77)
10. How may the dangers of handling radium be minimized? (p. 81)
11. Enumerate arguments in favor of an organized medical staff. (p. 85)
12. What are some of the advantages and disadvantages of an open hospital? (p. 88)
13. What benefits result from artificial light therapy? (p. 102)
14. What should be the hospital's attitude when asked to recommend an individual undertaker? (p. 108)
15. How should hypodermic injections be administered? (p. 110)
16. Who should notify the family physician regarding his patient's progress while he is in the hospital? (p. 112)
17. What factors affect curative value of occupational therapy in mental cases? (p. 116)
18. Name ways to reduce fire insurance costs. (p. 120)
19. How should new buildings be protected against fire? (p. 120)
20. Is a personal relationship possible between patient and physician in a hospital? (p. 126)

Philadelphia General Hospital, Philadelphia. The musical program that preceded Dr. Penniman's address was furnished by the University of Pensylvania Quartette.

The intern problem was the general theme for the morning session, Thursday, with four speakers discussing the subject from four angles. The first on the program was John L. Burgan, superintendent, Abington Memorial Hospital, Abington, who briefly told how the interns were appointed in the hospitals of Philadelphia. Edith B. Irwin, superintendent, Westmoreland County Hospital, Greensburg, told of the difficulties and the overcoming of these difficulties in securing interns for a small hospital. Dr. Charles W. Mayo, a nephew of Dr. William J. and Dr. Charles H. Mayo, Rochester, Minn., who is an intern at the Robert Packer Hospital, Sayre, interestingly told how the intern picks the hospital, giving a variety of reasons why certain students wish hospitals in a certain part of the country or of a certain type. Dr. William Pepper, dean of the school of medicine, University of Pennsylvania, was the last speaker on the subject, telling what the medical school and intern committee require of a hospital for proper internship. With these four opinions expressed the general discussion opened. All four of the papers brought forth several opinions and it was the general feeling that the session had proved to be one of great value.

Laboratory Charges Discussed

The second half of the morning program was devoted to the debate between Dr. Stanley P. Reiman, director of laboratory, Lankenau Hospital, Philadelphia, and Dr. Herbert Fox, director of the Pepper Laboratory, University of Pennsylvania Hospital, Philadelphia, on the subject "Laboratory Charges—Flat Fee System." Dr. Reiman advocated this system and told of its advantages, while Dr. Fox pointed out what to his mind were the disadvantages of the system.

Two addresses and a round table were the features of the Thursday afternoon session. Mrs. E. S. H. McCauley, secretary of welfare of the Commonwealth of Pennsylvania, Harrisburg, who was to have read the first paper, "The Relation of the Welfare Department to the Hospitals of the State," was unable to do so on account of indisposition and her paper was read by an assistant.

Dr. B. L. Scott, bureau of restoration, Department of Welfare, Harrisburg, read the second paper on the romance of restoration. He told of the work that is being done and its direct and indirect effect upon every community in the state. He outlined the difference between city and small town work and the different methods that must be employed.

Lewis N. Clark, superintendent, Germantown Hospital, Philadelphia, conducted the round table on hospital problems and several important matters were discussed, chief among them purchasing and charges that should be made in emergency cases.

Dr. George W. Reese, superintendent, Shamokin State Hospital, Shamokin, asked the blessing at the banquet that was held on the evening of Thursday. Dr. Reese, besides being a surgeon and hospital superintendent, is a minister. The speaker of the evening was Irving O'Hay, New York, a soldier of fortune, who told in a rather humorous manner his adventures as a tramp, soldier, actor and public speaker. His rough and picturesque career was depicted in equally rough and picturesque language.

The session on the closing day was given over to a general discussion on social service work in the hospital from three angles. Lena R. Waters, director of the social service department, Hospital of the University of Pennsylvania, Philadelphia, and executive secretary of the American Association of Hospital Social Workers, was the first speaker. She told of the aims of social service work in the hospital, of the work that is being accomplished and of the further uses that can be made of this department. The relation of the physician to the social service department was discussed by Dr. William D. Stroud, Pennsylvania Hospital, Philadelphia, and Dr. H. K. Mohler gave the version of the hospital executive toward social service. General discussion followed these three papers, nearly every superintendent attending the meeting giving his opinion on the subject.

A telegram was received from the American Hospital Association expressing the good will of the president, Dr. R. G. Brodrick, director of the Stanford University Hospitals, San Francisco, Calif. This was read by the president-elect of the American Hospital Association, Dr. Joseph C. Doane.

The last feature of the meeting was a masterly address by Michael M. Davis, executive secretary, Committee on Dispensary Development, New York, upon "The Development of the Out-patient Department." He told of the progress that had been made during the past five years in out-patient work and the amount of work that is being done in every part of the country. He urged those present to make every possible use of the out-patient department and to foster its further development.

Many visitors from other states attended the meeting this year, among them Dr. C. W. Munger, director, Grasslands Hospital, Valhalla, N. Y.; Dr. S. S. Goldwater, director, Mt. Sinai Hospital, New York; Missouria Martin, R. N., superintendent, Muncie Home Hospital, Muncie, Ind.; John H. Olsen, superintendent, Bushwick Hospital, Brooklyn, N. Y., and Dr. O. F. Ball, Chicago.

CHICAGO DIETITIANS CONSIDER NEW DEPARTMENT STANDARDS

A consideration of the suggested minimum standards for hospital dietary departments was one of the main features of the March meeting of the Chicago Dietetic Association. The proposed standards were read by Mrs. Louise Gilbert, Presbyterian Hospital, Chicago, president, and discussed, and it was decided by the group that dietitians should be given a chance to consider the changes and later report to Dr. Malcolm T. MacEachern, associate director, American College of Surgeons, hospital activities, Chicago.

The following topics were brought up for discussion at the meeting: The use of acidophilus milk in the diet; the use of paper trays and paper glasses; the value of sauerkraut in the diet; the value of prepared orange juice; the use of prepared milk tablets; the value of artificially colored gelatin; protein milk, purchased prepared; the use of corn syrups in baby feedings.

Some recipes for the use of beef and pork liver in the anemic diet were given by Miss Carlson, American Institute of Meat Packers, Chicago.

CLINIC FOR INDUSTRIAL DISEASES ESTABLISHED

A clinic for industrial diseases is to be established at the Montreal General Hospital, Montreal, in connection with the new department of industrial medicine to be opened at McGill University, Montreal, in the near future.

IS ARTIFICIAL LIGHT THERAPY AN ESSENTIAL FORM OF TREATMENT?

By J. C. Elsom, M. D., Department of Physical Therapy, Wisconsin General Hospital, Madison, Wis.

THE therapeutic values of heat and light have come down to us from earliest times. Many religions of the ancients had as their basis the worship of the sun, the god of day. Many peoples have worshiped fire as a deity, notably the ancient Persians and the Aztec tribes in South America.

A complete system of sun worship existed in Peru when the Spaniards landed there in 1526. The sun, moon and stars were all considered deities and the Incas, or Peruvian monarchs, claimed to be the children of the sun. The rainbow and lightning were worshiped as servants of the sun, and fire was considered part of the properties of the sun and as such was an object of adoration.

Thus, from the earliest historical times people of different races have blindly but instinctively realized that



Good arrangement in physical therapy department, Wisconsin General Hospital, Madison, Wis., showing how booths may be arranged.

somehow mankind was dependent upon the sunlight as a beneficent friend. Today we are none the less convinced that heat and light are necessary for life itself and that, deprived of these agents, all animal and vegetable life fails.

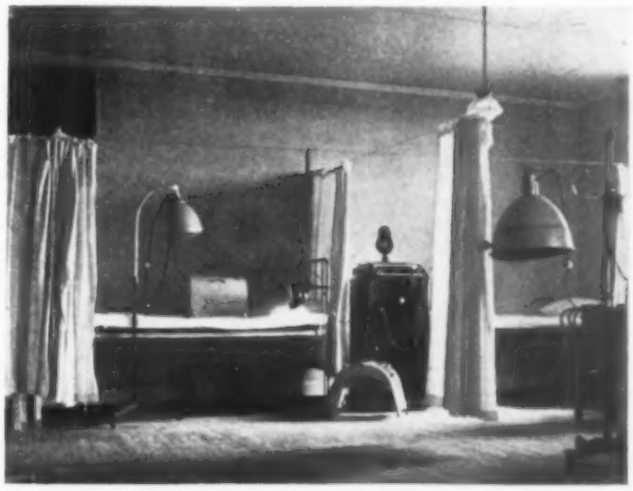
In recent years we have made scientific application of these agents for therapeutic purposes, and today there is scarcely a hospital in the country that does not make free use of heat and light for relieving human suffering. Therapeutic lamps of various styles, shapes and intensities are on the market and are becoming used increasingly for the relief of pain, congestion and inflammatory and infectious processes. These lamps make use of large bulbs of from 500 to 1,500 watts; some are clear, others are tinted blue, the latter being reputed to be of more sedative effect.

In addition, recently there have been produced various elements and compositions of minerals that furnish a reddish glow and heat by the electrical resistance of the material used. Most of these forms owe their efficiency to a high degree of infra-red value, thus securing, no doubt, greater intensity of heat and, perhaps, greater penetration. The application of heat is quickly and comfortably made, and every part of the body may be easily treated. The lamps should be constructed with parabolic reflectors so as not to focus sharply at a point, but to give a diffused and even application of heat. This matter has been attended to by most, if not all, of the manufacturers.

The so-called body "bakers" offer an additional form of heat-giving apparatus, these being constructed usually with a large hinged case in which are placed numerous carbon or other type of lamps. Thus a knee, elbow or the whole abdomen, chest or back may be given the heat treatment while the part is under the baker. These bakers differ in the method of adjustment, the better forms being those permitting easy raising, lowering and spreading so as to adapt themselves to the part being treated.

Within the past ten years or so, there have been produced a number of ultraviolet lamps, with rectifiers to change the alternating current into the direct, the actinic rays being generated in the quartz tube partly filled with mercury. Thus an intense mercury vapor light extremely rich in ultraviolet rays is produced, that has many beneficial therapeutic applications. It seems reasonable to suppose that the general tonic effects of this form of irradiation are the most valuable properties of the lamp. It is quite well determined that by exposure of the body to the ultraviolet rays the red blood cells are increased, the hemoglobin improved in quality and a decided raise in calcium and phosphorus content of the blood is brought about.

The numerous forms of these ultraviolet lamps all have the same mercury quartz tubes, so that, perhaps, there is no difference in the efficiency of the lamps of various makes, except in the methods of adjustment and handling. It would seem that none of the manufacturers may justly claim superiority as far as actual results from clinical application is concerned. As a matter of fact, all are good and no manufacturer can afford to place a poor or in any way inefficient product on the market.



Room where physical therapy treatments are given. A diathermy apparatus is shown in center.

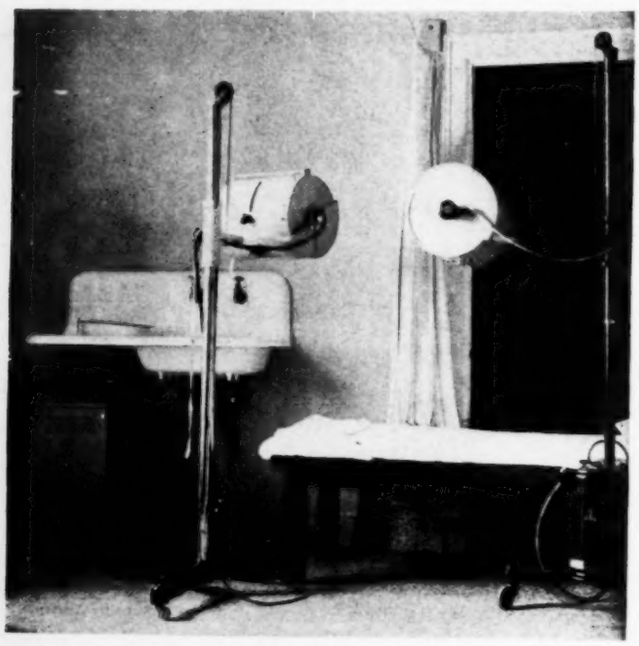
For many years the European clinics have made use of the carbon arc lamps as a source of ultraviolet light. These lamps are not nearly so rich in the actinic rays, however, but approximate actual sunlight and produce a good proportion of the infra-red rays, which are valuable, if heat is a necessity, in addition to the effects of the rays from the upper part of the spectrum. Exposure to these lamps requires a much longer time, however, and when many patients are to be treated, as is the case in most clinics, the time element is a considerable factor. However, this form of lamp seems increasingly popular in clinical use and has the advantage of being of great durability.

As the primary local effect of heat is hyperemia (increased peripheral capillary circulation), the tissues are warmed up, softened, muscular action is favored, sweat glands are stimulated, stasis is relieved, and pain is reduced. Hence the chief therapeutic values of radiant heat and light consist in the relief of many painful and inflammatory conditions. It is the primary form of treatment in physical therapy, where several forms of treatment are to be used. It is useful to precede massage, mechanical manipulations and stretchings. It is also well to use some form of heat before applying galvanic and faradic stimulation.

Some of the painful conditions benefited by heat are the following: sprains, fractures, neuralgia, neuritis, muscular soreness and stiffness, torticollis, bursitis, synovitis, arthritis, adenitis, lymphangitis and accessible infections of all types.

Radiant heat and light have a decided tonic effect, stimulating nutrition through their action on the sympathetic nervous system, and promoting a sense of well-being.

The local application of radiant energy from incandescent sources is antiseptic, directly, from its heating effect

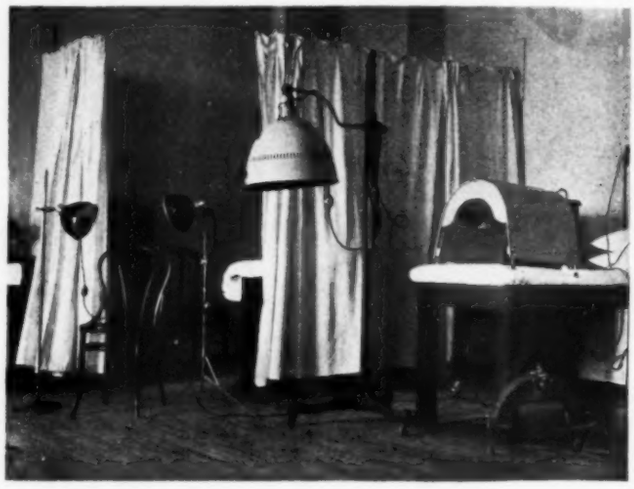


A corner of the ultraviolet room.

upon bacteria, which cannot thrive except between certain temperature limits; and, indirectly, by the hyperemia that brings in all of Nature's own anti-bacterial resources to aid in overwhelming the already weakened germs.

The length of treatment by heat methods varies with the case in hand. In general, it may be said that from ten minutes to half an hour is sufficient. Sometimes longer treatments are indicated but it must be remembered that excessively long treatments are tonic and exhilarating.

Heat and light treatment, therefore, should have a large place in the equipment of the modern hospital. Rooms for physical therapy should be large, light and well ventilated. They should never be placed in basements, as is often done. A convenient arrangement is shown in the



Different types of radiant lights are shown here.

physical therapy department of the Wisconsin General Hospital, Madison, Wis. Heavy wires are strung from the walls and on these is fastened a heavy grade of cotton cloth arranged to slide easily along the wires. Thus, booths may be quickly arranged that secure sufficient privacy, besides allowing of abundant ventilation. The curtains are easily washed and should extend to about six inches from the floor.

A few of the radiant heat and light machines, all of which are easily portable, are shown here. It is desirable to have a sufficient number of these heaters, so that practically each booth contains one easily accessible. One of the illustrations shows the well lighted room in which physical therapy treatments are given. A diathermy apparatus is shown in the center. This form of high frequency therapy is remarkably effective, but does not come within the scope of this paper. A corner of the ultraviolet room, shown also, is likewise divided into booths, and it is especially necessary that there be good ventilation as an ozone odor emanates from the lamps.

Since the demand for a considerable amperage of current is necessary, the wiring of the rooms is of great importance. In the construction of the hospital, attention should be paid to this fact and sufficiently heavy wires installed to carry easily a rather heavy current. The 1,000-watt lamps take four or five amperes each and if several are being used at one time, in addition to other forms of light, high frequency machines and galvanic machines, the drain is too great for light wiring. Fuses will undoubtedly be blown, unless the wiring is adequate.

It would seem altogether desirable in a new hospital that specific plans for a department of physical therapy be considered at the outset, instead of trying to fit the department to any available space that might be left. The methods of physical therapy treatment are so valuable and such an adjunct to the usual medical and surgical methods, that the room taken by the department certainly justifies itself, provided, of course, that the attention of a trained medical man be given to these agencies, and that a sufficient number of intelligent technicians be employed to carry out his directions.

THE OPEN FORUM

Thoughts, opinions and criticisms are invited for these pages from readers in all departments of hospitals and related services. Please address letters and other communications to the Editor, THE OPEN FORUM.

SEPARATE BUILDING OR DEPARTMENT FOR THE MATERNITY?

IN the March issue of THE MODERN HOSPITAL Dr. J. B. De Lee, professor of obstetrics, Northwestern University Medical School, Chicago, presented his views regarding the special needs of the modern maternity, his contention being that the general laws of hospital planning apply only in part to the modern maternity.

Dr. De Lee's argument for complete architectural isolation of maternity cases is at variance with current practice in many respects, and in the April issue Dr. J. Whitridge Williams, obstetrician-in-chief, Johns Hopkins Hospital, Baltimore, Md., stated his reasons for believing that architectural isolation is not needed as a safeguard against infection, provided that the services of the hospital are well arranged and that rigid aseptic technique is carried out. He also pointed out that if such technique is lacking even complete isolation will be of no avail.

Because of the importance of the subject and the rapidly increasing use of the hospital for maternity cases, the following opinions from men of experience in this field will be of interest:

J. B. HOWLAND, M.D., Superintendent, Peter Bent Brigham Hospital, Boston:

"The radical recommendations for the hospitalization of maternity cases laid down in Dr. De Lee's article on 'What Are the Special Needs of the Modern Maternity?' in the March number of THE MODERN HOSPITAL are, to say the least, startling and disconcerting to many people concerned with general hospitals having an obstetrical department. Can it be possible that all of the modern theories regarding the manner of transmission of contagious diseases are so far wrong that it is not safe to have obstetrical patients except in a separate building with separate kitchen, laundry, nurses' home and helps' dormitories? May we not have even tunnels or corridors connecting this department?

"The cause of puerperal fever is a streptococcus and not a spore-bearing organism. It is known that streptococci are not difficult to kill and that boiling for a few minutes or autoclaving at fifteen pounds pressure for thirty minutes, the common practice in most hospitals, does this without fail. I firmly believe that in any modern hospital laundry, no streptococcus can survive the washing process, when followed by drying and mangling.

"I should like to know of any bacteriologist or physician experienced in the care of contagious diseases who believes that a puerperal infection may be transmitted by the 'swirling dust' of tunnels or corridors.

"Autoclaves sometimes are faulty in operation but this is no excuse for faulty sterilizing. Controls are on the market whose use determines beyond question that a 'load' is sterilized. If gloves, instruments and utensils are boiled, there is no excuse for their not being sterilized.

"If we cannot trust the surgical technique of the visiting physician, the intern and the nurse, I am afraid we have not acquired safety for the mother and the babe by having our obstetrical patients separated from the medical and surgical cases by brick and mortar barriers.

"After reading Dr. J. Whitridge Williams' article in reply to Dr. De Lee's paper, as published in the April number of THE MODERN HOSPITAL, we take courage to believe we may continue to build the maternity ward as a part of the general hospital, and have the nurses' home, the laundry, the kitchen and the employees' dormitory function for the whole hospital.

"Anyone who has visited the Chicago Lying-In Hospital, Chicago, and who has looked over the plans as shown in Dr. De Lee's paper will be sure to find many helpful suggestions. Probably no other man in the country has given as much thought to planning hospitals for obstetrical cases as he has. Some of his suggestions, such as toilet facilities with each room, are good, but also expensive. We all agree, I think, that it is not desirable to carry bedpans through the corridors to the utility room, but to do so is not dangerous provided every pan is sterilized before it is used again.

"More evidence will have to be produced than Dr. De Lee has brought forth before we shall make recommendations to the building committees of general hospitals to follow his recommendations for a complete, separate unit for the obstetrical department. If he is right in his contentions, most hospitals will have to cease having such a department on the ground of prohibitive expense."

HUGO EHRENFEST, M.D., St. Louis, Mo.:

"A discussion of the views expressed by Dr. De Lee concerning the erection and management of the ideal maternity is of much interest. It is my belief that Dr. Williams, both in his unstinted praise of many of the suggestions as well as in his objection to others as a whole, presented the opinion probably held by the majority of obstetricians.

"Obviously it is the chief aim of Dr. De Lee to provide for puerperal women additional protection against infec-

tion. I feel, however, that general acceptance of his various demands as the only admissable standard for the erection, equipment and management of all new maternities would, in its final effect, not reduce but actually increase the incidence of puerperal morbidity and mortality.

"'If they are accepted,' Dr. Williams logically concludes, 'the expense of putting them into effect will be so great as to preclude any great extension of hospital care for obstetric patients—.' This means, that parturients in ever increasing numbers, against their wish and better judgment, will be forced to submit to obstetric management under the notoriously inadequate conditions offered even in the best private home.

"This inevitable consequence would utterly defeat Dr. De Lee's ideal aims. This factor cannot under present social and economic conditions be eliminated from the careful consideration of the question that faces every group contemplating the erection of a new maternity: How can a given amount of money—the maximum available—be best spent in the interest of the parturient women of a given community?

"It will be easily seen that due stress on this essential financial problem will develop objection against Dr. De Lee's precise demands in regard to location and complete isolation, a separate septic department and the physical equipment of these buildings, but will in no way interfere with ready acceptance of the numerous other valuable suggestions of Dr. De Lee, chiefly in regard to adequate management of obstetric patients."

JOSEPH C. DOANE, M.D., Medical Director, Philadelphia General Hospital, Philadelphia:

"I have been much interested in reading the somewhat divergent opinions relative to the needs of the maternity hospital, of two distinguished obstetricians. The long experience and proved judgment of both cannot but command one's respect for their views, but their differences are so striking that they produce a feeling of confusion as to where the safe road lies in the successful conduct of a maternity department.

"Dr. Joseph B. De Lee, Chicago, in THE MODERN HOSPITAL YEAR BOOK for 1926, page 67, produced not a little evidence, which appeared satisfactory to him, to prove that the maternity department, conducted in a general hospital, is seriously menaced by its proximity to other types of wards and patients.

"He stated that thirty-three years ago, he had his first experience with an epidemic of puerperal infection, in which a number of patients lost their lives, and ascribes other infections, in part at least, to the fact that the maternity department in the instances mentioned was part of a general hospital. 'How, in these modern, aseptic days can this deplorable state of affairs be explained? Are we still ignorant about the habits of bacteria? Are there other factors besides bacteria involved? Must we accept the theory, discarded by a majority of surgeons, of an air borne infection? . . . . the most frequent carrier is the doctor, the intern, or the nurse.' Thus spoke Dr. De Lee a year ago.

"A few pages farther on, in the same volume, in an article by Dr. D. L. Richardson, superintendent, Providence City Hospital, Providence, R. I., a contagious institution, we find this statement:

"'Within the last twenty-five years it has been clearly demonstrated that air transmission seldom takes place, and that the correct method of preventing the spread of infection is by practicing surgical cleanliness.' And as one proceeds in perusing Dr. Richardson's article, abundant evidence is offered to prove that scarlet fever and measles, for example, may be safely treated in the same ward, provided rigid aseptic technique is followed.

"Indeed, it would appear to the casual observer that if it is possible by practicing surgical cleanliness to prevent the transmission of diseases so easily transferred by contact as the two above mentioned, the dictum that it is unsafe for a maternity hospital to exist within the walls that house wards for medical and surgical patients, should not be universally accepted.

"In Dr. De Lee's second article, which appeared in the March issue of THE MODERN HOSPITAL, he refers to the danger of infection of parturient women, which is produced by 'swirling air currents,' laden with dust, and by organisms, transmitted by 'carriers.' He states that it appears to be conclusively demonstrated that infection cannot be excluded from the maternity ward by such measures as proper sterilization, rubber gloves and a well schooled personnel. Nevertheless, experienced hospital administrators, surgeons and nurses will be inclined to question the inadequacy of all those weapons, which have proved so efficient in the handling of infectious and contagious diseases.

"The chain of any technique is no stronger than the weakest link in the personnel carrying out this system, and while the construction of an absolutely separate building for housing maternity patients may have its advantages, and may, from a theoretical standpoint, lessen the possibility of carriers transferring infection from general hospital to maternity wards, yet such a practice is not economically possible in most instances. When Dr. De Lee further states that not only must boards of trustees provide funds for the construction of a separate maternity hospital, but also for a second building for housing 'unclean' maternity cases, the argument, if not thus reduced to an absurdity, has certainly approached a financial impossibility, except where the most exclusive clientele is being served.

"No one will object to Dr. De Lee's contention that the appointment and equipment of a maternity department should not be second to any other department in the hospital. Nor is one inclined to look upon the work of the obstetrician as in any way secondary to that of the surgeon. We have gone too far beyond the day when we were satisfied with the services of the midwife.

"It does not appear either practicable or necessary, from the standpoint of either the hospital's ability to meet these requirements, or from the standpoint of safety to maternity patients, 'completely to detach from the rest of the hospital' the maternity department, 'the only connection being the steam and water pipes, electric light conduits, and telephone wires.'

"In the light of our modern knowledge concerning the nature of bacteria, the modes of their transmission, from the sick to the well, and particularly in view of our recently acquired knowledge concerning scarlet fever and measles, it would seem that Dr. De Lee, in his anxiety to do everything possible to prevent puerperal infection (which is laudable) has gone to an extreme that neither the present finances of hospitals generally, nor the belief of obstetricians as a class, makes possible or advisable.

"The reference to the 'high ground water' theory of Pettenkofer, and the suggestion of the transference of germs by air currents, cannot but remind one of the theories in regard to this and other infectious conditions that were held in pre-antiseptic days.

"Many of Dr. De Lee's suggestions in regard to the size of rooms, the danger of maternity interns attending autopsies and the construction of a bathroom for each

single room, are excellent, and are just what should be expected from a man of his experience.

"The excellent article, which appears in the April issue of THE MODERN HOSPITAL, under the signature of Dr. J. Whitridge Williams, Baltimore, appeals to me because of its saneness, and its adherence to the practical.

"After all, what Dr. De Lee has said of the need for architectural isolation of the maternity department might be said in regard to other hospital divisions. A case of erysipelas is removed from a surgical ward at once, but it need not be conveyed to a separate building far from the general hospital's wards.

"The writer must not be understood as having urged any let-down in the business of throwing a protective barrier, which is represented by the strictest aseptic technique and the most humane and scientific care possible, about the maternity patient. On the other hand, some of the suggestions that Dr. De Lee has set down in his excellent article appear to a hospital administrator who is also much interested in the theory and practice of medicine, to be not always necessary or practicable, and to be of the type of recommendations that sometimes emanate from a specialty department, without consideration as to their financial practicability."

L. A. SEXTON, M.D., Superintendent,
Hartford Hospital, Hartford, Conn.:

"To us it is a grave question whether an article from an acknowledged authority, such as Dr. De Lee, may not defeat its purpose by creating erroneous impressions. His conception of a modern maternity hospital is so fantastic and extreme that it loses much of its appeal because of the remoteness of its possibilities. There are many suggestions, however, in Dr. De Lee's article that should be incorporated in all maternity hospitals whether they be separate institutions or merely departments of the general hospital. To any one contemplating the erection of such a unit a visit to the Chicago Lying-In Hospital, Chicago, will prove to be most helpful.

"Those who did not know Dr. De Lee personally and had only his article from which to draw conclusions would imagine they were back in the days of the miasmatic theory of the transmission of infections, and had thrown into the discard all of the knowledge of aseptic technique that has been gained since that age in the history of medicine.

"What is most needed in maternity hospitals and general hospitals having maternity services is suggestions that lead to the formulation of plans that are practical, workable and within the limits of the things possible for the average hospital or community.

"A great deal more importance should be attached to the obstetrician and his personal technique than to the location of his patients. We are willing to concede to the obstetrical patients the same type of accommodations, facilities and technique that we do to our surgical patients and for these we do not find separate buildings necessary.

"It is a well established fact that the various types of infection, even contagion, can be handled in the same ward by the same personnel without cross-infection if a sufficient amount of intelligence is put into the service.

"My observations during the years I was connected with the Johns Hopkins Hospital, Baltimore, Md., confirm all the statements made in Dr. Williams' article and perhaps account in a measure for our belief that much of what Dr. De Lee has suggested is unnecessary. Not that most of his suggestions would not be ideal so far as the patients are concerned, but the eternal shortage of funds in all parts of the country will probably always prevent the construction and maintenance of separate units such as he has recommended.

"Dr. De Lee has in his Mother's Aid Pavilion all he has recommended, yet he states, 'While it appeared to work out well on paper we are not nearly certain we have succeeded in practice.'

"After all is said and done relative to isolation, asepsis and end results are compelled to be in direct ratio to the amount of intelligence put into the service by everyone who comes in contact with any part of it."

ROBERT D. MUSSEY, Obstetrical Section,
Mayo Clinic, Rochester, Minn.:

"With the steadily increasing number of pregnant women seeking confinement in hospitals, these timely articles by two eminent obstetricians are of especial interest and value. Both agree on the fundamental conditions that should obtain in every lying-in hospital, namely, equipment, interior arrangement and rules for carrying out strict asepsis in the conduct of confinement cases and for the care of the puerperal woman. That they should differ in some details is not surprising. Dr. De Lee as head of an architecturally isolated lying-in hospital, has become prominent in his profession and Dr. Williams has also attained prominence as chief of a well known obstetric unit, which is a part of a general hospital system.

"Dr. De Lee contends that the lying-in hospital should be architecturally isolated on account of the danger of infection being transmitted from medical and surgical cases or by attendants in a general hospital. In support of his plan he could name other similar hospitals, notable among which are the New York Lying-in Hospital, New York, and the Rotunda Hospital, Dublin, which have accomplished far-reaching and permanent advancement in obstetric practice. Dr. Williams maintains that similar results may be obtained in obstetric units that are an integral part of general hospitals.

"Our obstetric section is in St. Mary's Hospital, Rochester, Minn., in which surgical and, to a lesser degree, medical cases predominate. The maternity service is situated on the fourth and fifth (upper) floors of a wing of the hospital, isolated only by a door and a short closed corridor from the medical section. The pediatric section occupies the floor beneath. Our regulations in regard to aseptic precautions would conform generally with those upon which both writers agree. We have never had reason to think that any infection has been transmitted to the obstetric section from the general part of the hospital.

"Granting that a lying-in service can be carried on as a unit of a general hospital without jeopardizing the patient's safety because of infection, there are two other debatable points: First, are there many communities in which financial and other conditions are such that architecturally isolated lying-in hospitals can be built or maintained? Is not a general hospital with an obstetric section following the excellent suggestions of Dr. De Lee in regard to interior plans a more practical arrangement? Second, the trend in medicine has been toward the separation of the various branches of the medical profession into distinct specialties sufficient unto themselves. Is not the coordination and cooperation of a general hospital service of distinct value to the average physician or obstetrician? Should not the obstetrician benefit from the contact and advice of physicians in other branches of medicine and from the regular general staff conferences which should be a routine in every hospital group "

HOW MENTAL PATIENTS REACT TO COLOR AND A HOMELIKE ATMOSPHERE

By W. R. Dunton, Jr., M.D., Medical Director, Harlem Lodge,
Catonsville, Md.

IT is interesting to note the papers that have appeared in THE MODERN HOSPITAL and elsewhere upon making the hospital homelike. These point out that until recently the trend has been toward making the hospital look like a cheese factory or some other sterile institution. Apparently with the idea that germs would not alight upon white or that dust is most quickly detected upon white surfaces, white has dominated the hospital. White walls and furnishings were almost universally used in the hospitals until we realized that the same degree of asepticism could be maintained by using pleasing colors in place of the monotonous, uninviting walls and furnishings.

In mental hospitals, where the germ bugaboo was not so much of a fetish, more pleasing decorations have been used for longer periods. However, there has been a tendency in these places to use colors that were ordinary and frequently dingy, colors with medium values being used where those with higher chroma or lower value might have been more pleasing.

Window Shades Are Varied

A number of years ago the late Frank B. Gilbreth defined hospitals as "happiness factories"—a pleasing definition. It would seem, however, that the hospital authorities emphasized the factory part and were content that the product, recovered patients, was turned out without much thought of the emotional side of the individual.

About two years ago, upon assuming charge of a forty-bed sanatorium for mental and nervous invalids, I had the opportunity to try out a number of plans and projects that had been conceived some time before but which had not met with the approval of those in charge of a larger hospital. In so simple a matter as window shades it hardly seems necessary to sacrifice the emotional stimulus to be derived from a variation of a standard, in order that exteriorly each window presents the same appearance. Is it not better to consider the inhabitants of the building rather than the casual passerby? Was not the building erected and is it not maintained for the benefit of the patient? We have, therefore, chosen our window shades for the individual rooms with much more pleasing results than if we had adopted a standard, and so far we have not heard an unfavorable criticism of the exterior of the building. It is probable that in the general view of a building, window shades are a small detail not given particular attention by the observer.

It is undoubtedly convenient to adopt uniform standards for furniture, such as bedsteads, bureaus, wardrobes and such furniture, but it is unwise to adopt standards for the decoration of rooms, with the consequent monotony of identical rooms. In mental hospitals, where a ward is often a collection of bedrooms or sitting rooms, and the patients are moved from ward to ward as their condition improves, it is undoubtedly a mental stimulus for patients to find a variation from the room which they have been occupying. But is there any good reason why individual rooms on the same ward should not differ in decoration, even though it may be necessary to have the same kind of furniture?

We have endeavored to have each room individual, to have the surroundings stimulating to the patient. Depending upon individual color preferences, will this be pleasant or unpleasant? Whichever it may be, we prefer an unpleasant reaction to indifference. We have made a number of daring color combinations, that is, we have ventured to get away from that which is ordinary or standardized, thereby hoping to obtain some sort of reaction from our patients. In this work we sought the advice of color experts of a commercial establishment, who went to a great deal of trouble to assist us by furnishing samples and specifications, but which unfortunately were too ordinary or too standardized for our purpose. One of their representatives visited the hospital after we had painted a number of walls, among them the entrance hall which had been done in what painters call a light terra cotta shade, similar, I have been told, to the wall decoration of the Louvre.

When I asked the representative his reaction to this color he said that he would prefer a buff. As he had been showing me some sketches where this color was used for an entrance hall I realized that he was thoroughly standardized, and said, "The buff walls would have shown you that we had adopted the standard and are ordinary people. When you see the terra cotta you realize that it is unusual, and you think that the people here must be unusual, which is the impression we wish to make."

This color had been chosen before receiving the samples from the company, although we found that the color submitted for the walls of a room for a depressed patient was identical with what we had used. In this room we used terra cotta on the walls, cream on the ceiling and frieze, with a black picture moulding, and a window curtain of plain green tinging on olive. This gave a pleasing, cheerful effect in a room with a northern exposure.

Unusual Color Schemes Have Pleasing Effect

Our reason for using colors that have fairly high chromas and low values is that we realize that our mentally depressed patients require a greater stimulus than do those in normal health. But even in our nurses' rooms we have used some unusual color schemes without objection, and, on the contrary, have heard commendation. One room has light terra cotta walls, cream ceiling, and pea green furniture in harmonizing tones. The good effect is increased by a chintz window shade with the same colors predominating, and the rug and counterpane. Another room has neutral gray walls, cream ceiling, and bright red furniture decorated slightly with a deep blue. Still another room has drab walls, cream ceiling, with a light gray furniture decorated with a pure blue. All of the above rooms have an eastern exposure, as has another room with drab walls and white furniture decorated with blue, and a room with pale yellow walls, blue picture rail, cream frieze and ceiling and gray furniture decorated in blue.

On the west side two rooms are especially notable. The walls of one are painted a beautiful blue green, which gives an extraordinary feeling of depth, naturally desirable in a small room, with bright yellow furniture decorated with pure blue. The other has bright yellow walls with a two-inch border of pure blue, and grey furniture with pure blue decorations.

All of the interior decoration has been experimental. We are willing and anxious to make changes as soon as we find that we have made an undesirable color combination. It is impossible to convey an accurate idea of the above rooms without giving the spatial value of the above colors, for on this factor depends color harmony. Also the rugs, counterpanes, window shades and decorations on the furniture add much to the color effects. This last is well illustrated by two rooms, each with drab walls and with white furniture, one of which is relieved by blue decorations, so that the whole effect is much more pleasing.

The window shades in these rooms are of chintz, each chosen to harmonize with the general color scheme of the room and without reference to the outside appearance. As yet no one has noted any abnormality in appearance. If necessary to defer to custom, two shades may be used, or a plain shade may be lined. As a rule, our counterpanes show some color. Patients have made several with designs in French knots or in appliqué. Others are striped in colors or have designs of some sort. A bright and cheerful dormitory facing southwest has gray walls and cream ceiling. The three iron bedsteads are painted blue-gray, decorated with mulberry. The rugs are also a mulberry color. We planned to have counterpanes made, using the mulberry motif with green, but, failing to achieve a satisfactory design, we are using blue striped counterpanes to good effect.

One difficult problem we had was a long narrow hall and stairway, three feet wide and ten feet high, with a dado six feet high made of matched boards and a forty-inch frieze. The dado had been painted white, evidently with the idea of securing the most light, and the remainder a pale yellow. We did not wish to make this a dark color to absorb light, but decided to experiment and made the ceiling and frieze ivory, the picture moulding black and the wall below it light terra cotta. Rather to our surprise, there has been no noticeable diminution in light, and on account of the greater depth of the color the hall looks wider than when it was painted white. This quality should be considered when choosing colors for small rooms.

Our main building was a country mansion with larger rooms. It is furnished chiefly with mahogany or walnut furniture. The walls are mostly gray, but we plan a number of changes. Cretonne window shades and fancy counterpanes add much to the appearance of the rooms.

Nibbling Is Encouraged

Another homelike touch is the use of the cooky jar. In each sitting room we have jars or painted canisters containing ginger snaps and graham crackers. Cracker jars may also be used in individual rooms, so that patients may be given the opportunity to eat if they so desire, and if the meal served has not appealed to their appetites, temporary satisfaction can thus be secured. As nibbling is often the precursor of an increased and normal appetite at meals, we feel that it is to be encouraged. We find that patients may show an almost greedy nibbling for a time and then begin to eat in a regular fashion. Only once in the two-year period did we have to curtail this privilege, when for a short time we had to remove the jars before breakfast because a patient would come down early, fill up on crackers and then eat little breakfast. A week's abstinence from this orgy brought about normal habits. We also believe that a "snack" before retiring aids in promoting sleep and in decreasing the hypnotics needed.

We had thought that the use of homemade preserves and pickles would appeal to our patients and accordingly we have made a special effort to can these and serve them in attractive containers. However, we have found that simply placing pickles or preserves on the table is not enough to create a desire for them, as the orange marmalade jars frequently had to be emptied because their contents had been allowed to spoil. The mildly psychotic and neurotic patients need to be stimulated by suggestion or invitation.

Our pets also add another homelike touch. Dogs, cats, pigeons, canaries and gold fish add interest. Even in general hospitals it is believed that pets might be used more than they are in sun rooms and day rooms.

Have Books in Patients' Rooms

Books and magazines in patients' rooms, as well as in the sitting room, make a good impression upon the new patient and lend a more homelike atmosphere. Damage to and loss of this reading matter is to be expected and should not be a cause for grief if such has a stimulating effect upon patients. Reading lamps or bed lamps should be provided, and it should be remembered that some of the prettiest of the latter are not the best.

These details are some of the means that may be utilized to create a less formal atmosphere in any hospital, general or special. While it may be urged that they are impractical in a larger place, it should be remembered that our better hotels endeavor to add homelike touches, even to the extent of providing needles and threads and buttons on the pin cushion. Do many of our hospitals have pin cushions?

It will cost little to paint and furnish a room gaily, rather than sombrely, and observe the effect upon patients who may occupy it.

But even with all these things a kindly, humane spirit on the part of the staff is most important, and without it furnishings fail in their mission.

HOW IMPORTANT IS THE LIBRARIAN?

The hospital librarian is now generally recognized as an important part of the hospital's personnel in her role of selecting and distributing suitable books for patients. Since books cannot be distributed to patients indiscriminately and the choice rests entirely with the librarian, her ability is readily measured by her selection.

The librarian should have as great responsibilities and be called upon to make as complete reports as the head of the occupational therapy department, and if properly encouraged she can make intelligent reports on the mental reaction of the patient to the different kinds of reading matter. The value of such reports will be recognized since over a long period an analysis of such records would permit of book classification that would be a valuable guide to hospital librarians.

DRY POWDER EXTINGUISHERS DECLARED INFERIOR

Recently attention has been called to the fact that some hospitals purchase and use dry powder fire extinguishers which, according to the National Board of Fire Underwriters, are not regarded as of any value as protection against fire. The board states that dry powder extinguishers are not listed by their laboratories and that "all forms of dry powder fire extinguishers are inferior for general use; that attempts to extinguish fires with them may cause delay in the use of water and other approved extinguishing agents and therefore their introduction should not be encouraged."

Your Everyday Problems

A department devoted to the informal discussion of problems arising in the everyday life of the hospital superintendent.

[No attempt has been made to offer final conclusions relative to the questions considered in this department. THE MODERN HOSPITAL will gladly welcome further comment by its readers on any of these problems, or the presentation of other queries for discussion in later issues. —Editor.]

Should the Hospital Recommend Any Individual Undertaker to Inquiring Relatives?

There is probably no hospital in the land in which the above problem, in some form, has not arisen. Often when a patient becomes critically ill relatives from a distance are summoned. After the death of the patient these persons frequently find it most difficult to attend to the practical matters that are immediately before them. Indeed, it appears to be a part of the psychology of grief to desire aid in making decisions as to the steps then necessary. As a result, these relatives often inquire of someone about the hospital in regard to securing the services of a suitable undertaker.

The question then arises as to the ethics of recommending any individual person or firm to those inquiring. Very often this query is put to a member of the social service staff, to a nurse, to a doctor in the hospital ward or to some office attaché.

Now, it is the duty of the hospital not only to do everything possible for the sick but also to alleviate the grief of relatives, and to guide them through the difficult hours succeeding the death of the patient.

But it cannot be denied that unethical undertakers too frequently make a definite arrangement with some hospital employee to act as their agent on the grounds. In one hospital it was found that members of the ward personnel were deliberately seeking patronage for a certain undertaker in the locality. Rightfully, this practice was stopped and those participating in it punished. Such commercialization of the hospital's function cannot be condemned in too strong terms and is unethical in the last degree.

What, then, should be the attitude of the hospital under the above circumstances? When relatives inquire of a physician, nurse, or hospital attendant as to the best undertaker to secure, these persons must be schooled to refer such inquirers to the superintendent's office.

When such inquiries come to the superintendent's office, the administrator or one of his co-workers usually obtains a list of undertakers in the city or locality and states that the firms included therein are skilled and ethical, but that the individual must make his own choice. Sometimes a telephone directory is the source of this information.

Ethical embalmers' associations are doing all in their power to prevent the unscrupulous members of their profession from employing the cheap methods of the ambulance chaser, to secure business for themselves.

It is suggested that when a hospital superintendent learns that any particular undertaker is securing a large number of calls from his institution, he quietly investigate the source of these calls. Should he find, for example, that the clerk whose duty it is to execute and record death or insurance papers is in any way concerned with the summoning of any particular undertaker, he should immediately dispense with the services of this officer.

Any attempt to control the business of caring for the bodies of the hospital's former patients, whether it has a political, religious, fraternal or any other source, must be definitely and unerringly put down.

Should the Hospital Treat Drug Cases in Its General Wards?

The drug patient is a difficult person to handle. Since those suffering with the "drug habit" are found everywhere, the hospital is often required to admit these patients for shorter or longer periods.

It is a well known fact that the successful treatment of narcotic addiction requires complete isolation of these patients from others, and that this isolation or quarantine must be as rigid, if not more so, than that imposed upon patients suffering with contagious diseases.

No successful treatment of these patients can be carried out in a general hospital ward. This statement is based upon the fact that visitors are almost certain to smuggle drugs to these patients. If visitors are not a source of this supply, then persons actually in the hospital's employ are likely to yield to the importunities of these addicts.

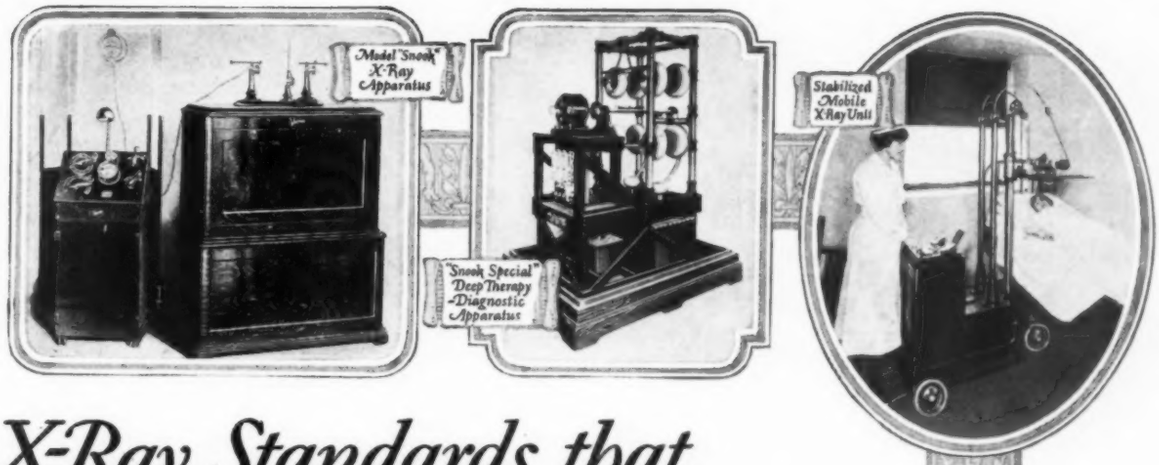
The presence of these persons in a general hospital ward is more or less demoralizing because of the ill effects of their contact with other patients, and because of the constant attention the nurse must give to her drug supply to prevent its being tampered with.

General hospitals, therefore, not equipped with isolation rooms and not acquainted with the habits and traits of the drug addict, should employ their energies toward treating patients who are not only much more promising from the standpoint of effecting a cure, but also more appreciative of the institution's care.

It may also be added that it is folly for the hospital to employ in any capacity involving the handling of patients or medicines, persons who are known to be addicted to the non-medicinal use of opium or any of its derivatives.

What Is an "Unclean" Maternity Case?

The term "clean" and "unclean," as applied to maternity cases, is in quite general use throughout the hospital field. In many hospitals wards or rooms are set aside for the separate treatment of these two groups of patients. The term "unclean," used in reference to maternity cases, usually bespeaks the presence of venereal infection. On the other hand, sometimes this term is applied to the infection



X-Ray Standards that are Your Standards

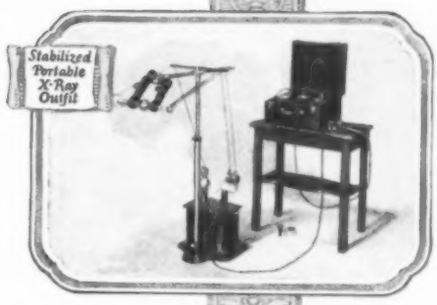
NEVER has the Victor X-Ray Corporation considered itself solely a manufacturer of X-Ray equipment. Its aim has always been to play a leading part in the advancement of roentgenological technique, thru the development of new and improved apparatus which makes this possible.

Thus the quality of Victor X-Ray equipment is perhaps not easily explained except when this attitude of the Victor X-Ray Corporation is taken into consideration. If you hear it said that Victor X-Ray apparatus is better than necessary, remember that we have developed this equipment in cooperation with medical science. The standards of the roentgenologist have guided us—rather than the question of a large or small profit.

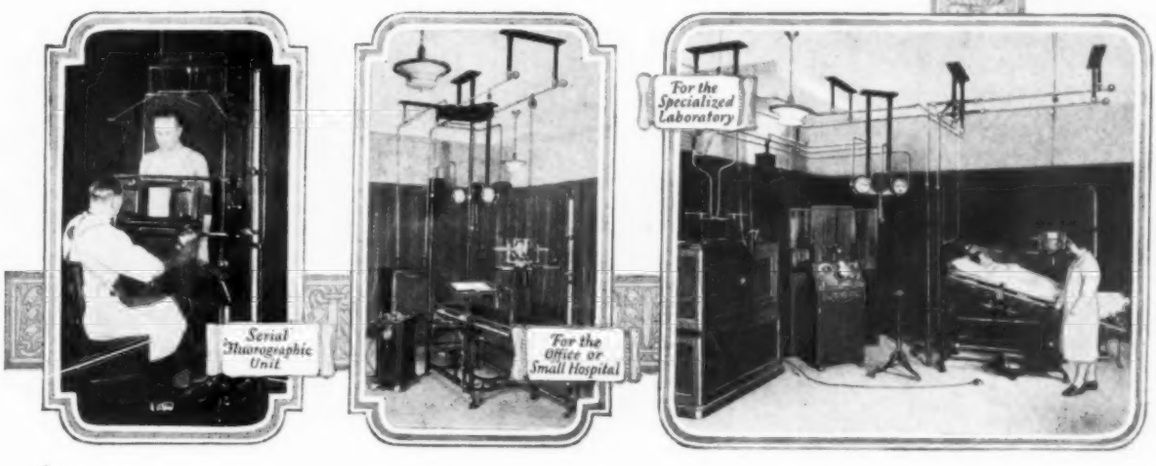
Victor research—from which some of the outstanding developments in X-Ray apparatus have resulted—is simply the manifestation of our ambition to be of service to the medical profession. Thirty-three branches, advantageously placed, make it possible for the Victor user to share to the utmost in all that Victor has to offer.

Write for address of Victor Branch nearest you.

VICTOR X-RAY CORPORATION
2012 Jackson Boulevard, Chicago







For complete index of advertisements refer to the Classified Directory

of the pregnant woman with pus-producing organisms.

The chief difficulties encountered in the early recognition of these cases appear to lie in securing prompt bacteriologic evidence of the infectious condition.

When a maternity patient, near term, is admitted to the hospital there are always some signs that might be construed as indicating venereal infection. It is customary for the physician examining the case to secure immediately cervical and urethral smears for detection of such infection.

The question which here arises results from a difference of opinion among bacteriologists. Some bacteriologists will return a positive report of gonorrheal infection, if pus organisms are found in vaginal or cervical smears. Others require, for a positive report, not only the presence of pus organisms but also recognition of the familiar biscuit-shaped gonococcal organisms within the cell.

It ofttimes becomes necessary for the hospital to possess isolation rooms for use until the infectiousness or non-infectiousness of these cases can be verified. From the standpoint of syphilis, clinical signs of infection ofttimes indicate the need for isolation from clean cases, but in the absence of such signs a more thorough serological examination is required. It can be truthfully stated that ofttimes, even in the presence of a positive Wassermann reaction, such a maternity case is of no danger to others about her.

Sometimes hospital workers are inclined to think that when this reaction is positive the patient is a distinct menace to others, and to the physicians and nurses as well. Most institutions believe, however, that it is wise immediately and efficiently to separate the venereally infected patients of either type from those not so diseased.

Cases of uterine infection with pus organisms should also be separated from other maternity patients. It is a question which is of the greater danger to other ward patients—those suffering with venereal diseases or those with a septic infection of the genital organs or blood stream.

There is another aspect to this question, and that is the protection of nurses and physicians from infection during their attendance upon the patient. In at least one instance known to the writer a nurse assisting at a delivery almost lost her eyesight from having splashed in her eye a drop of secretion laden with gonococci.

If a diagnosis of venereal or septic infection cannot be made in the receiving ward, then the admission of suspected cases to the clean maternity wards should be delayed until further studies can be made.

What Is the Safest Technique for Giving Hypodermic Injections?

When one considers the myriads of disease producing organisms that infest the human skin, and when one thinks of the great number of hypodermic injections given daily in the country's hospitals, one must marvel at the relatively few infections resulting therefrom. This becomes a source of even greater wonder when it is remembered that at present there is no accepted standard of hypodermic technique. Nor can there be any uniformity in the strict adherence to the local rules laid down by hospitals for carrying out this usually simple procedure, because of the great number of persons, particularly nurses, affected.

Infection of the skin or sub-cutaneous tissues by pus-producing organisms, such as the streptococcus or the staphylococcus, is usually of minor importance from the standpoint of the patient's welfare.

Ofttimes, in the drug addict such infections are multiplied many times during the course of the year, and cause no more inconvenience than does a small boil. But there are certain deadly organisms, that live in the absence of oxygen, and which are sometimes introduced by the hypodermic needle. Reference is here made to the bacillus of tetanus and to the bacillus of Welch, or the gas bacillus. In the medical literature is to be found not a few instances in which tetanus was supposed to have resulted from a hypodermic puncture.

In the case of both the tetanus bacillus and the gas bacillus, the fact that these organisms multiply by means of spores complicates the problem of prevention. Spores are known to be exceedingly difficult to destroy by heat or chemicals. In the case of gas bacillus infection it is not difficult to surmise its source. The human intestinal tract teems with these organisms, and should the skin and bed clothing become soiled with fecal matter, as is often the case, particularly in delirious patients, there is a possibility that this deadly infection may result from a needle puncture. Indeed, this accident has occurred in not a few cases throughout the hospitals of this country.

The technique of administering a hypodermic injection usually includes the sterilization of the needle by boiling it in water in a spoon, by use of an alcohol or gas light, and of the use of this water, or water similarly sterilized, as a solvent for the drug to be injected.

The sterilization of water by boiling in a spoon is open to criticism, because of the size of the container and because of the brevity of the time during which the water is actually at the boiling point. The contamination of the contents of a bottle containing adrenalin, or of some digitalis preparation, is also possible because of the frequent withdrawal over a period of time for injection of small amounts.

The sterilization of the skin of the patient is also often improperly performed. The use of alcohol for this purpose is quite proper, but as soon as the skin dries, there being no mark to show the area thus prepared, it is possible that the nurse may pierce an area of skin which has not been sterilized.

The use of 70 per cent alcohol for the sterilization of the inside of the hypodermic barrel should be efficient, but the final cleaning of this chamber by the use of water which is considered sterile, but which may be placed in a surgically unclean container, is another danger that exists.

It is suggested that hypodermic solutions which are frequently used be kept in the original bottle, which has been provided with a rubber cork of the type employed for containers of sera and other biological products. This cork, being thin in the center, can be repeatedly punctured by the hypodermic needle, and the solution withdrawn into the hypodermic barrel. The top of the cork may be satisfactorily cleansed with carbolic acid and alcohol before this puncture is made. To employ this practice, the hypodermic barrel must be of glass, and properly graduated, thus obviating the use of a minim or other measuring glass.

It is good practice when glass syringes are employed to wrap them in muslin and sterilize them daily in an autoclave. When a hypodermic injection is to be given a surgically clean syringe is thus available. Needles may be sterilized in the same package, and sometimes a wooden applicator is added to make the set complete.

If tablets are to be used, they should be of the type prepared especially for hypodermic administration. The container in which the water is boiled should be of sufficient size to enable the nurse to maintain it at boiling point for at least two minutes. Water previously steril-

Caution!

THE *right* gelatine, (Knox Sparkling Gelatine), dissolved and added to milk for the bottle baby, will make it easier for the baby to digest the milk and absorb full nourishment. It largely prevents colic, regurgitation, diarrhea and other baby ailments. It helps malnourished children. It has great value in diets for diabetes, tuberculosis, convalescing patients, surgical cases, etc.

BUT—the *wrong* gelatine will curdle the milk!

Any plain gelatine with an acid content—is the *wrong* gelatine. Any gelatine that is flavored, colored or sweetened, is the *wrong* gelatine. Any gelatine not produced under constant bacteriological control is the *wrong* gelatine!

***Knox** is the approved gelatine because it is all pure, plain gelatine—every particle of it. It is neutral—no acidity! No flavoring. No coloring. No sweetening. All fine bone gelatine—the type of gelatine used and commended as a milk modifier by such eminent medical authorities as Jacobi, Herter, Alexander, Ruhräh and Friedenwald.*

Some physicians, not realizing the difference in gelatines, occasionally forget to specify *Knox* Gelatine in making their prescriptions. The result is that mothers, in some cases, are buying brands unsuitable for dietary purposes. As a protection, therefore, *we have requested the Government to raise the standards on gelatine.* Pending Government action, may we suggest that you specify *Knox* when you prescribe gelatine?

We have the findings of recognized authorities to prove the importance of Knox Gelatine to you in your practice. We have the experience of active physicians. We have valuable laboratory reports, not only discussing gelatine as a milk modifier, but outlining its importance in various kinds of diets. May we send you these reports?

METHOD OF COMBINING GELATINE WITH MILK:

Add one teaspoonful of Knox Sparkling Gelatine—which should first be soaked about ten minutes in a little cold milk and then dissolved over hot water or in hot milk—to the glass of milk. (In infant feeding formulas use 1 tablespoonful of gelatine, dissolved as above, to the quart of milk.)

KNOX GELATINE LABORATORIES

400 Knox Ave., Johnstown, N. Y.

Producers of high grade Gelatine for 38 years

KNOX
SPARKLING
GELATINE

"The Highest Quality for Health"

Pioneers in conducting research into the dietetic value of gelatine

ized may be used, which will simplify this procedure. Sterile handling forceps may be used to remove the drug tablet from its container, and to drop it into the sterile water container or even into the hypodermic barrel itself. There are some convenient hypodermic trays for sale by dealers in hospital supplies. These usually include a handy standard for supporting the container for boiling water, an alcohol lamp, bottles and holders for solutions.

The use of iodin and alcohol for skin sterilization seems advisable, because of not only making certain the proper cleansing of the skin, but also of marking the site thus prepared. Hypodermics given to an incontinent or delirious patient must be performed with extreme attention to the details of sterilization.

It may be added that gas bacillus infection has resulted from skin incisions, made for the purpose of letting blood, and from needle punctures for the intravenous injection of solutions or other medication.

The watchwords in hypodermic or intravenous medication should be: simplification of technique in the preparation of solutions and of apparatus, and strict attention to detail in carrying out these steps.

Who Should Partake of the Midnight Supper?

The problem of serving three meals a day for hospital workers is of sufficient proportions that when an added meal is necessary for a part of the hospital's personnel the difficulties and expense involved are increased.

In every hospital it is necessary to provide a hot meal usually between the hours of 11 p.m. and 12 midnight. This meal is intended for night nurses, physicians on duty during most of the night, such as the night intern (where this system is in vogue), and for other persons, such as night attendants and watchmen.

The difficulty arises in deciding whether doctors, and sometimes graduate and pupil nurses whose active tour of duty ended at 7 p.m., but who have been on duty in the wards during the evening, shall partake of this meal.

Hospital superintendents have found that the group represented by young interns and nurses is not an easy one to satisfy, under any circumstances, from the standpoint of edibles. It is very much of a temptation for these young people, who may have visited a theater, or other place of entertainment during the evening, to go to the dining room where a night meal is in progress for the purpose of partaking of the food there prepared, and of enjoying the lively conversation of those present. Members of the attendant staff as well as other hospital employees are inclined to do the same, in regard to the food prepared for this grade of night workers.

Some hospitals rule that a physician who is called for a maternity case, for example, and who is on duty or just relieved from duty at midnight, may have access to this meal. Other hospitals arrange for the chef or dietitian to leave, in some accessible place, a light luncheon, which includes sandwiches, milk or sometimes coffee, so that nurses or interns not on active duty may take advantage of this provision before retiring. A small diet kitchen is placed in some nurses' homes, where cocoa, crackers or sandwiches are available for day nurses before they go to bed.

The cooking of food or the making of candy, in ward diet kitchens is a practice that must be discouraged, but to prevent it completely is most difficult, as has been learned by superintendents generally.

The provision of a luncheon in the doctors' and nurses' homes is certainly a wise step, if it will prevent what has been termed "food bootlegging" in hospital diet kitchens.

What Does the Hospital Owe to the Referring Doctor?

It is sometimes found that the family doctor who refers a case for care in the wards or rooms of the hospital is forgotten, in so far as notification of the progress of his patient's condition is concerned. The family, which has engaged a private physician to care for one of its members, looks to this physician for up-to-date information in regard to the patient, even though he is not actually treating the patient whom he referred to the hospital.

It is most embarrassing to this physician to learn, through his patient's relatives, that the patient has been operated upon. These persons appear justified in complaining because they were not informed, either by the hospital or by the family physician, of this fact. They cannot understand why, even though they knew that an operation was imminent, they had not been notified of its exact time.

The same situation arises when a notice has been sent to relatives that the patient has become critically ill, and their family physician has no knowledge of this change in condition. It even happens, at times, that the death of the patient has taken place, and that the referring physician had no knowledge of its occurrence.

Is it the hospital's duty to keep in close touch with the physician who refers a case, or is it the duty of the physician who is actually treating the patient? The life of a busy hospital surgeon or physician is so full of pressing duties, that even were it his function to notify the doctor referring the case of a change in the patient's condition or of the scheduling of an operation, it is feared that this information would be delayed even more than it is now.

Many hospitals have a place on their records for the name of the referring doctor. This is done in order that the hospital may keep in touch with the physician sending in the patient. Indeed, it would seem that were this matter of notification done in a strictly ethical fashion, it is the hospital's surgeon or physician in charge of the case who should extend the courtesy to the referring physician of requesting his presence at the time of operation.

But the practical aspect of this problem seems to be, not whether it is right that notification should be given but rather how this shall be done. If time allows, a letter from the hospital office to the referring physician, notifying him of the scheduling of his patient's operation, is practicable. If this is not possible, a telephone call or a visit from a hospital messenger or a social-service worker, would fulfill the same purpose.

In the case of the patient's having become critically ill, or of death having taken place, a telephone message or a telegram may be sent to the referring physician, as well as to the patient's relatives.

The hospital should strive to create and maintain the reputation of meticulously informing the physicians in its community of the condition of their patients, and thus forestall a fear among physicians that should they send their patient to the hospital he is likely to be lost, in so far as their knowledge of his condition is concerned.

It may be stated that the staff doctor usually advises the patient on his discharge to return to the physician referring him to the hospital. Moreover it is a distinct breach of medical ethics not to send the patient back to his family physician when the hospital has done all that it could for his medical welfare. To be neglectful or careless in cementing this healthy mutual understanding between the hospital and the community's physicians is to lose an opportunity to add to the volume of the hospital's work, and its service to the community.



MIDLAND

TILE-OLEUM

The Lightning Cleanser

NEATNESS and success are close companions. A neat, clean hospital building suggests at once the success of the institution. Floors are the mirrors through which the brightness and neatness of the entire building are reflected.

TILE-OLEUM is made essentially to produce this neatness. It cleans tile or marble floors and walls to the point of glistening newness. It quickly removes all dirt and grime no matter how deeply ingrained.

By the frequent use of TILE-OLEUM there is given to the hospital that air of neatness that invites confidence and patronage.

There is a TILE-OLEUM sales office in every large city of the country. By communicating with the home office at Dubuque, Iowa, you will be quickly placed in touch with the closest Midland representative.

Midland Chemical Laboratories, Inc.

Dubuque, Iowa, U. S. A.

HOW MUCH CAN OCCUPATIONAL THERAPY DO FOR OUT-PATIENT PSYCHIATRIC CASES?

By C. P. Oberndorf, M.D., Associate Psychiatrist, Mount Sinai Hospital, New York

AS IN other medical specialities, the trend of treatment of psychiatric disorders for the last twenty-five years has been in the direction of generalized prophylactic measures, and of the encouragement of voluntary cooperation on the part of the individual showing symptoms of mental abnormality before the disorder has become a difficult if not a hopeless problem. Not only have the extra-mural efforts of state hospitals been greatly intensified lately, through the supervision of patients on parole and the establishment of consultation clinics in smaller cities, but an ever increasing number of social and educational agencies have been enlisted in the work of rectifying mental disease and conduct disorder before it reaches the stage commonly termed "insanity."

Medical practitioners, and surgical specialists in particular, immersed in their activities of combating physical disease, and with them the general hospital as a unit, remained apathetic, indifferent and uninformed concerning matters of mental health, and because of this lethargy the general hospital has overlooked its tremendous possibilities for service as a psychiatric center.

Few general hospitals include psychiatric clinics in their out-patient departments, or psychiatrists on their attending staffs, although the affiliation of a psychiatric clinic with a general dispensary redounds to the advantage of both. Any general dispensary benefits from the influence emanating from a clinic in which the social point of view should unswervingly predominate, as well as from the services of psychiatrically trained physicians, qualified to assist other specialists in evaluating psychological factors frequently complicating physical disorders. The psychiatric clinic derives the even greater advantage of close cooperation with the various specialties, notably gynecology, genito-urinary diseases, surgery, and ophthalmology, located in the same building. Furthermore, the position of the psychiatric clinic as merely one of the varied group of medical specialties generally associated in any large hospital, tends to remove the stigma and disgrace which neurotic patients and their families still, unfortunately, link with mental disease.

What Mount Sinai Hospital Is Doing

For the past five years Mount Sinai Hospital, New York, has included in its out-patient service a psychiatric clinic that now operates six mornings a week. The individuals referred to this clinic are suffering, roughly estimated, from various forms of psychoneuroses in 50 per cent of the cases, from psychoses (mostly mild depressions and incipient dementia præcox cases), in 25 per cent, and from the so-called "constitutional inferiorities," endocrineopathies and epileptiform conditions in 25 per cent.

The active treatment in all the functional cases is strongly influenced by the psycho-analytic, technical approach and the interpretative method which in such diversified cases as are treated in an out-patient clinic, must necessarily be modified by re-educational or persuasive procedures, drugs, surgery and alteration of the environment of the patient as exigency demands. Over two years ago an occupational therapy clinic for these out-patients was formally established as an adjunct to other therapeutic measures, although emphasis in all treatment still remains steadfastly focused upon psychotherapeutic measures directed at the correction of psychological abnormalities held directly responsible for the symptoms shown.

Originally, four years ago, the occupational therapy clinic began as an irregular experiment on a small scale in charge of volunteer workers. The usual disadvantages and defects of volunteer workers soon developed, namely, unreliability of attendance, neuroticism, over-enthusiasm and favoritism in regard to patients. Notwithstanding these disconcerting flaws in the successive amateur instructors, the patients themselves were sufficiently benefited and interested and so manifestly disappointed when the clinic temporarily ceased, as to warrant the employment of a paid worker by the hospital.

The Out-Patient Problem

Occupational therapy in an out-patient department, where attendance is entirely voluntary and patients cannot be coerced into coming, presents problems not found in closed institutions or those where the patient is temporarily confined. The work itself must offer sufficient incentive to induce the patient to leave his home and often travel a considerable distance, sometimes at a financial sacrifice, and in addition to pay the small admission fee to the clinic. It has been found that a goodly number of suitable cases, mostly incipient dementia præcox cases and mild mental defectives, are willing to do this over many months and even years at a time. On the other hand, some psychoneurotic individuals, suffering from compulsive fears of the street or people could not venture out unless especially called for at their homes. Through a small fund placed at the disposal of the clinic, we were able to arrange for this satisfactorily, sometimes paying another member of the class to perform this service.

Nearly every foot of space in the Mount Sinai Hospital out-patient building is occupied so that no separate room for the occupational work is available, but part of the hall on the fifth floor of the building has been improvised as a workshop for the patients, by the simple expedient of arranging benches to form a hollow square. Here, because of the cramped space, lack of privacy and insufficient room for equipment, the variety of work is limited, and many of the customary types of craft work such as carpentry, weaving, jewelry making, have had to be omitted. Basketry, painting small boxes, cardboard construction, including portfolios, boxes and lampshades, sewing, embroidery, also crocheting and knitting, are the types of work most commonly taught, while the tinting of Christmas and other holiday cards is indulged in spasmodically. In isolated instances chair caning, furniture painting and rug making have been undertaken.

In the psychoses, especially in the dementia praecox cases and mild depressions, the primary value of the occupational therapy consists in focusing the attention of the patient on interests outside himself. This exteriorization of the patient's thoughts, perhaps the main object of the work, only slightly exceeds its secondary value of freeing the home for a number of hours each day from the care and burden of these patients. This apparently insignificant circumstance often gives the family a sufficient

150 Pounds Pressure  CRANE VALVES  2500 Pounds Pressure



The new City Hospital of Indianapolis, covering two blocks, is equipped with the latest appliances. Architect, Adolf Scherrer. Plumbing Contractors, Hayes Brothers, Inc. Crane plumbing materials installed.

A CITY HOSPITAL WITH FINEST EQUIPMENT

Mindful of the medical principle that the best cure is prevention, Indianapolis has taken steps, by erecting a hospital group worthy of comparison with the best, to forestall the flurries of criticism to which city hospitals are subject.

In this City Hospital patients will be served, medical staff aided, and municipal officials protected, by thoroughly modern equipment. For this institution, as for so many other fine, new hospitals, Crane plumbing materials were chosen.

CRANE

Address all inquiries to Crane Co., Chicago

GENERAL OFFICES: CRANE BUILDING, 836 S. MICHIGAN AVENUE, CHICAGO

Branches and Sales Offices in One Hundred and Sixty-two Cities

National Exhibit Rooms: Chicago, New York, Atlantic City, San Francisco, and Montreal

Works: Chicago, Bridgeport, Birmingham, Chattanooga, Trenton, Montreal, and St. Johns, Que.

CRANE EXPORT CORPORATION: NEW YORK, SAN FRANCISCO, MEXICO CITY, HAVANA

CRANE LIMITED: CRANE BUILDING, 1170 BEAVER HALL SQUARE, MONTREAL

CRANE-BENNETT, LTD., LONDON

CIE CRANE: PARIS, BRUSSELS



Pre-natal Bath as installed in Indianapolis City Hospital

respite from the tedious custodianship of an irritating sick person, to permit them to continue to care for the patient at home for the balance of the day instead of being compelled to commit him to an institution. For this reason the clinic should be held daily except Sundays throughout the year, so as to yield a continuity of the dependency situation for the patients, a daily recurrent stimulation of his interest and reliable cooperation from the family.

It has been extremely gratifying to observe how these patients, suffering from mental troubles of varying severity, some of whom could be easily committed as insane, have been willing and able to work, notwithstanding the fact that they are objects of curiosity to other patients and orthopedic clinics that occupy the rooms on this floor during clinic mornings. We have little disturbance, occasionally an outburst of temper or a convulsive seizure, but certainly there is less excitement and disorder about these persons gathered in their open stockade than there is in the group attending some of the other special clinics that are housed in the same building.

Has Proved a Diagnostic Aid

Quite unexpectedly the occupational therapy clinic has proved a diagnostic aid, in many instances, as a temporary observation ward, where patients' application to tasks, conduct toward co-workers and their attitude toward work has revealed or emphasized characteristics sometimes not given a full valuation by the physicians in the history or examination. Occasionally when a doubt exists in the mind of the physician investigating a new case, as to the necessity for commitment to a closed institution, he may refer the patient to the occupational therapy class to test his stability and adaptability. The reports of the occupational therapists have also enabled the physicians to gauge more accurately the probability of the eventual social and economic adaptability of the individual, for the well spoken intentions and assertions of some patients in the consultation room fail of realization in the workshop. On the other hand, some apparently hopeless dullards prove steady and efficient workers under proper guidance.

Many of the psychoneurotics find in occupation a means of temporary distraction from their compulsive thinking and welcome even the artificially arranged association of the class as a relief from the isolation into which their sickness so often plunges them. In mental defectives and schizoids, in individuals whose mental peculiarities and asocial tendencies incapacitate them from initiating normal contacts in their indigenous environment, the clinic provides a spurious but, nevertheless, partially effective substitute.

To foster an esprit de corps, patients are urged to work together, although with the egocentric tendencies of so many of the patients, this is not always successful. With this idea of making the occupational therapy clinic a social nucleus, at the instance of the head social service worker, the clinic has given "parties" at a nearby settlement house, the Meinhardt House. These social gatherings, which have proved unexpectedly lively and entertaining, are an innovation that only a short time ago might have been considered foreign to the scope of an out-patient clinic's activities but may be advantageously extended in the future as an auxiliary psychotherapeutic measure, as a means of awakening those forces, namely, emulation and identification that are operative in all group movements. They are well attended by both active and discharged patients to whom invitations are sent.

It became evident that unless the patient regards the work as a serious adjunct of his treatment he would not cooperate fully and that to the average dispensary patient the presence and active interest of the physician signified treatment. For that reason the moral support of the frequent medical consultations with the therapist in charge, in the presence of the patient, is considered absolutely indispensable. While the recreational and therapeutic aims are never slighted, we find it an incentive, catering to the always available acquisition impulse, to pay the patients one-third of the sale receipts of their work. Two-thirds of the income from sales, which are numerous, goes to pay for materials used. The total cost of conducting the clinic during the year of 1925, aside from the salary of the therapist, amounted to less than one hundred dollars.

Of course the entire success of a clinic of this type depends upon the skill and personality of the therapist in charge. Lack of zeal, persistence, patience, justice or enthusiasm on the part of the instructor soon transmits itself to the patients who are as a class emotionally dependent upon the leader, and particularly susceptible to indifference, always desiring to receive a bit more than they give and jealous of distinctions shown to a particular patient. The instructor should not only know something of the mental dynamics back of the dependency phenomena, which she constantly encounters, but must be willing to give persistently of herself, not in the manner of fluctuating pity and sentimentality but contributing reliable, impartial, sympathetic support. The success and continuation of this clinic has been due to the exceptional capability of the therapist, Marguerite Emery, and her conscientious volunteer assistants.

Factors Affecting Curative Value

Let us be clear as to the curative value of occupational therapy in mental cases. In my opinion, if given alone, without psychotherapy of the interpretive type, it has only casual worth. As an auxiliary it serves a distinct need in providing a means of exteriorization of energy and tends to rehabilitate through the prevention of excessive indulgence in phantasy or absorption in those neurotic symptoms which so often represent substitutes for phantasy life which has failed. This function, which occupation serves, does not in any way supplant, nor does it even greatly facilitate, the liberation of that energy which the patient has pathologically attached either to infantile objects and aims or to himself. Such a fundamental alteration of energy re-alignment must be initiated and elaborated through individual psychotherapy with the patient.

And now a word of warning. It is easy for the physician to consign the patient to occupational therapy and delude himself that he has really accomplished some beneficial result for the patient. Unless the patient is continually aided by the physician through advice and consistent interest, in either his failure or progress at the therapeutic work and enlightenment in connection with the deeper problems complicating his life, the occupational therapy endeavor resolves itself into an expedient disposal of the case on a plane perhaps a trifle less aimless and insipid than inactivity or undirected routine activity. In some cases such a compromise disposition of the problem may be all that, from the standpoint of economics, it is feasible to attempt, but unless the physician is on his guard he is apt to lapse into the soothing habit of relegating too many puzzling or unfavorable individuals to the convenient consolidation of what is termed occupational "therapy."

The Wood Veneered Door —with the Fireproof Core!

Pyrono Fireproof Doors are built of the finest veneers applied over non-resinous, laminated cores, between which asbestos sheathing is mechanically bonded. They can be fitted tightly because, in extremes of heat and cold, they will not expand, contract, buckle nor bind in their frames. Built to order only.

YEAR after year, an increasing number of hospital building committees and architects are won over to the Pyrono idea: To protect door openings, "where fire first breaks through", with a fire barrier combining the homelike beauty of natural wood grain with the non-inflammability of asbestos.

Share the economies of increased production. Write for further information.



The Compound & Pyrono Door Co.
St. Joseph, Mich.

Py-ro-no
TRADE MARK REGISTERED
ASBESTOS-INTERLINED
DOORS

INSTALLED IN

Columbia - Presbyterian Medical Center, New York City.
Beth-Israel Hospital, New York City.
St. Luke's Hospital, Cleveland.
Good Samaritan Hospital, Cincinnati, O.
Starling-Loving Hospital, O. S. U., Columbus, O.
John B. Murphy Memorial Hospital, Chicago.
Municipal Tuberculosis Sanitarium, Chicago.

—and many other modern hospitals

MADE BY AMERICA'S OLDEST VENEERED DOOR SPECIALISTS

HOW FIRE INSURANCE COSTS CAN BE REDUCED*

By W. K. Palmer,
Indianapolis, Ind.

THE purpose of any fire rating organization must be twofold. That is, its experienced rater must have developed not only a sufficient knowledge to enable him adequately to measure the relative fire hazard but he must also cultivate keen insight with regard to the various individual hazards and their relation to each other, so that he can educate the owner or occupant of property as he goes along.

Any rating work that does not carry along with it at least a fair measure of fire prevention effort has certainly fallen far short of its aim. In addition to this the rating bureau must be in a position to furnish all manner of underwriting information to properly authorized parties. This involves the preparation of underwriting reports for companies, the furnishing of copies of rate make-ups and improvements letters to the assured upon request, or to his duly authorized agent. The Indiana Inspection Bureau and many other state rating bureaus operate under "anti-discriminatory" laws, and the rating schedules in use are applied in any particular case as they are applied to the class. The relative merits of various types of insurance cannot be discussed in this article as the Indiana bureau is a representative of virtually every type.

It is said that "the sturdy oak from a little acorn grows." The progress of fire insurance has been similar but so have our fire losses. You all know that the great Chicago fire is said to have started when the cow kicked over the lantern in the stable. Did you also know that it is claimed the Baltimore conflagration started from a match or cigarette carelessly tossed through a sidewalk grating which was not properly screened, igniting rubbish collected in the bottom of an areaway? Or that an attendant in the Iroquois Theater, Chicago, wasted valuable time in fighting a small fire with a useless powder fire extinguisher and the time he lost before turning in the alarm indirectly cost six hundred lives? The causes were minor but the effects of carelessness and lack of fire prevention work were staggering.

Fire Losses Are Mounting

The annual fire loss in this country is mounting steadily, approximating close to six hundred million dollars in 1926, in spite of the millions of inspections made yearly by fire departments and fire inspection agencies, advertising and other measures. The responsibility for the existing conditions is squarely up to the management of our institutions. The property owner and occupant should inform themselves as to the amount of the inherent fire hazard in their premises. The fire rate is a good barometer and represents a reasonably accurate measure as established through years of experience.

If fire protection is warranted in our factories, warehouses and stores, where daytime use and physically fit occupants are the rule, how much more necessary is fire protection in institutions that are used twenty-four hours each day in the year and filled largely with the helpless? A hospital burns every day in the year; half that many asylums and institutions are destroyed each week. Of every sixteen institutions in the country one suffers a serious fire each year and several times as many fires occur of insufficient size to get into public print or to become matters of insurance adjustment. Competent men can detect the possibility of fire with almost absolute certainty. The means of prevention is available to anyone who desires information and the cost of securing a large degree of safety is not prohibitive. There is, therefore, no excuse for the majority of the dangerous conditions that exist today.

There is cause for rejoicing in the fact that there are many of the newer hospitals today that in whole or in part approach the ideal from a fire safety viewpoint. Naturally the majority of these are so-called fireproof construction, but the number of truly safe institutions is small and in the large majority of older buildings the conditions are frequently appalling. Over 90 per cent of the existing institution buildings are of frame or wood joisted construction. The need, therefore, is for immediate action first toward the improvement structurally of these buildings, or the installation of automatic sprinklers or a combination of both.

How Automatic Sprinkler Operates

Before going into the matter of these structural changes in the buildings, let me insert a few remarks pertinent to the automatic sprinkler. Operating without human agency, ever on guard, quick to respond to the challenge of fire and conqueror in many battles, the automatic sprinkler has earned for itself the premier place in the fight for life and property loss against fire. A sprinkler system consists of a series of pipes close to or concealed in ceilings and to which sprinkler heads are connected at intervals of eight to ten feet in both directions. These heads are made with a special solder which melts at about 160 degrees F., which is under the boiling point of water. The sprinkler has a half-inch orifice and a deflector and under usual pressures from an adequate water supply will discharge from fifteen to twenty gallons of water per minute over an area some fifteen feet in diameter.

With such spacing of heads and their introduction under stairways, in closets, in ventilators and ducts, there is little chance for a fire to make headway. Today some one hundred institutions have been protected in whole or in part by automatic sprinklers, representing about 1 per cent of our institutions. Even with this small number of sprinklered hospitals and institutional buildings experience has been registered as attested by the following:

Rhode Island Hospital, Providence, R. I. Fire started in a pile of mattresses in the attic. One sprinkler opened and extinguished the fire before it was discovered.

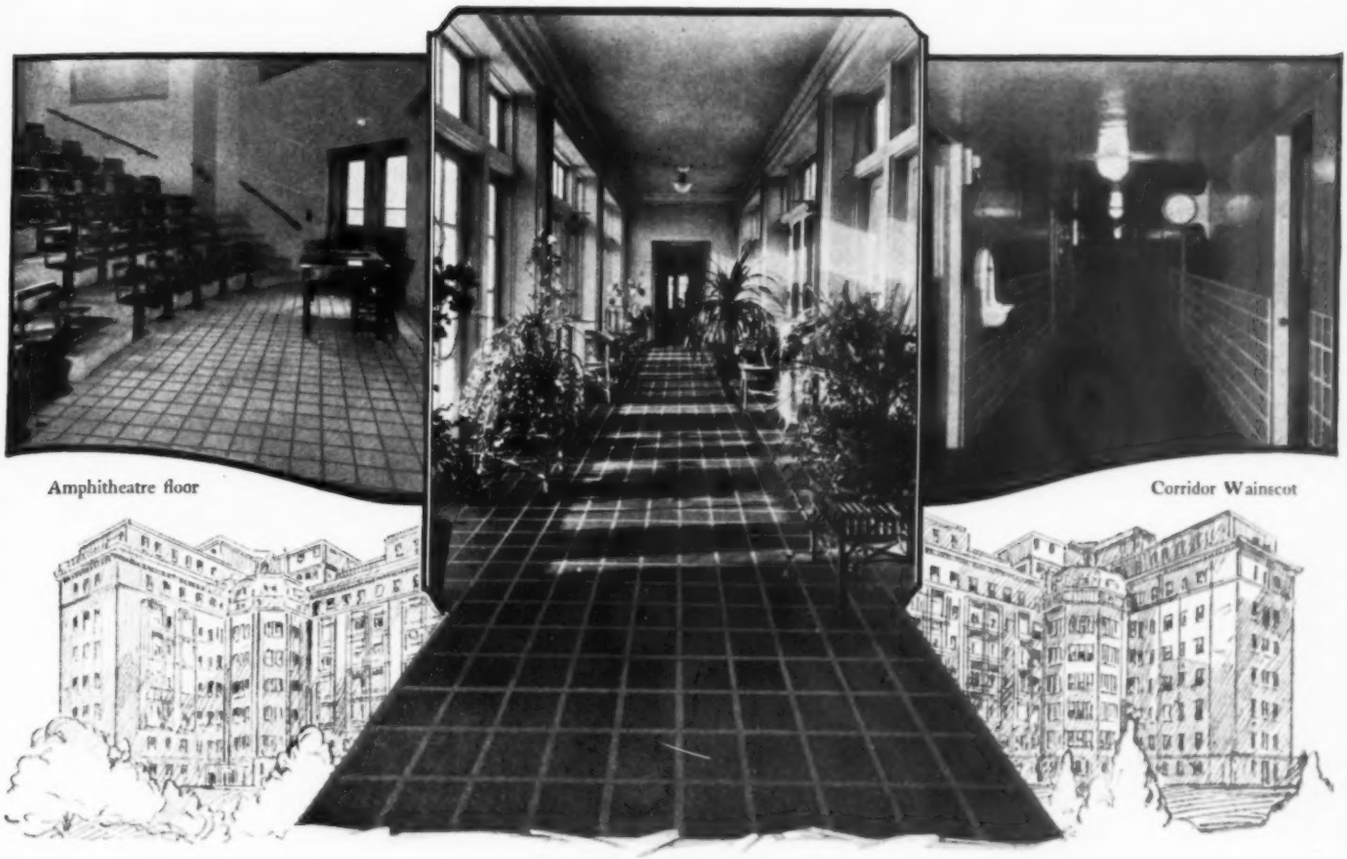
Homeopathic Hospital, Rochester, N. Y. Fire started on roof and burned through. Automatic sprinklers in concealed space underneath the roof extinguished the fire with trifling loss.

Butler Hospital, Providence, R. I. Fire started in the assembly hall from a match or cigarette. One sprinkler head extinguished the fire with little loss.

Any of these fires could easily have developed into a holocaust.

The automatic sprinkler system is without doubt the most dependable device against fire in its incipient stages. Automatic sprinklers are entirely practical in spite of

*Read at meeting of the Indiana Hospital Association, Evansville, Ind., April, 1927. The author is indebted for the information in this paper to H. W. Forster, committee on public information, National Fire Protection Association, Boston.



Amphitheatre floor

Corridor Wainscot

Promenade Floor

6x6 Romany Quarries in a few of the places used in the new Maternity Hospital, Cleveland, Ohio.
Abram Garfield, Architect The Wadsworth Addison Company, Tile Contractors

Beauty and Cleanliness — Inseparable!

FIRST of all—immaculate cleanliness, then—attractive appearance: are the prime essentials of the ideal floor and wall in the modern hospital.

In Romany Quarry Tiles, lasting beauty and ease of cleaning are inseparable. Both are assured by the very nature of Romany Tiles and the method of their manufacture.

They are made from a uniform blend of native clays, burned to flint-like hardness. Their attractive appearance is produced by the natural colors from the clays themselves!

For durability, permanent attractiveness and low cost, Romany Quarry Tiles stand alone among desirable floor and wall surfacing materials.

Romany Quarry Tiles are made in three plain colors — Romany Reds, Romany Greys, Romany Browns; and in a medley of golden shades that range from dark russets through tans to pale greens, the Romany Rainbow Tiles.

UNITED STATES QUARRY TILE COMPANY
PARKERSBURG, WEST VIRGINIA

ROMANY QUARRY TILES

the possibility of accidental opening of the heads when there is no fire. It is really a question of life safety from fire versus a remote possibility of a water spray from a single head being harmful to inmates. Structural conditions and use of fire resistive material in new buildings bring about a degree of safety that cannot be approached in the older buildings except by the installation of automatic sprinklers. It is the old building that generally is the most hazardous and the automatic sprinkler system properly maintained is the only sure cure for this hazard.

If a complete installation of automatic sprinklers cannot be obtained on account of lack of funds or other reasons, then a plan of partial protection should be conceived, this to be gradually extended as funds are available. Merely the installation of sprinklers in a single dangerous basement is a noteworthy step. These systems should be arranged so that they can be extended to upper floors of the buildings, and all hazardous sections should be protected first, such as storage rooms, paint and carpenter shops and laundries.

Getting back to the subject of structural features in the older combustible buildings, the following list of structural improvements should receive attention:

1. Division of buildings into as many different fire areas as practical, this to be accomplished by means of substantial masonry fire walls or partitions, with all openings between sections protected by recognized types of fire doors.
2. Enclosure of all vertical communications, such as stairs, elevator shafts, dumb-waiters, rubbish and clothes chutes with fire retardant partitions and doors.
3. Provision of a room with fire resistive walls, ceiling and floor for the heating plant, if located within the building.
4. Protection of the entire basement ceiling with hard plaster on metallic lath, fastened to under sides of joists. This will give much more protection than sheet metal nailed to wooden joists.

Expert opinion should be sought and proper legal authorities should be consulted, however, as to the necessity and adequacy of such changes before action is taken, and means of egress should receive special consideration.

Planning for Protection of New Buildings

In the construction of new hospital buildings or additions to old hospitals, have the architects submit plans to the fire rating authorities, with instructions that all features of the risk be reviewed and, if necessary, commented on in writing. Let me take this occasion to quote from an article that appeared in a recent issue of THE MODERN HOSPITAL, in a paragraph headed "Rates Made by Bureaus:" "This system of rating to a large extent permits the owner of property to make his own rate. If he is careful in the preparation of his building plans, using the facilities at his command, he can eliminate many features that would become a permanent charge in his insurance rate should they be allowed to remain in the plans. He can remove many if not all of the after-charges. In the selection of his site he can be careful to prevent bad exposures from his neighbors."

The foresighted builder today is to a large extent making his own rate by taking advantage of these facilities. The following points should be observed in the preparation of plans for new structures. It will be noted that only the so-called "fireproof" construction is advocated for new structures intended for this class of occupancy:

1. Only a type of floor and roof slab universally accepted as fire resistive should be specified.
2. Egress facilities should be given special consideration and not less than two adequate means of exit from each floor, remote from each other, provided for each fire section.
3. Specially hazardous features of occupancy, such as laundries, heating plants, storage rooms, x-ray film storage, carpenter, metalworking and painting shops, oils and similarly volatile storage, kitchens and refrigerating systems should be located in a separate building or a separate fire resistive room with standard fire doors installed on openings to such rooms.
4. Wood trim and flooring should be held to the minimum, with the maximum allowable number of metal doors and frames used. In this era of steel fabricating, good appearance need not be sacrificed in the matter of trim.
5. All vertical communications throughout the building should be protected with fire resistive partitions and doors.
6. An inside first-aid fire hose system, with adequate water supply available, should be specified.

Structural conditions have been covered in detail. The hazardous features of occupancy constitute an important element of the risk and are prevalent in every type of hospital, therefore the following suggestions would apply to both new and old buildings of any class of construction.

Occupancy headings are divisible into two main classes: Common hazards embracing heating, lighting and power; and miscellaneous hazards.

Heating Plant Should Be Isolated

We have already stated that the heating plant should be in a detached building, or isolated by fire doors in a fire resistive room in the main building. In addition all steam pipes and radiators should have ample clearance from combustible material to eliminate any charring of wood. Practically all hospitals today are lighted by electricity and all wiring should be strictly in accordance with the provisions of the National Electric Code and subjected to thorough inspection by a competent electrician at least once a year. The power hazard is limited mainly to the installation of a few motors for minor uses. The matter of the location of these motors should be carefully considered and after installation they should be kept clean.

The following miscellaneous hazards comprise practically all the remaining occupancy features found in hospitals:

In the kitchens all cooking ranges should be provided with ample insulation where the floor is of combustible construction; hotel type ranges not provided with legs, installed on wood floors, should have flooring provided of incombustible construction. Ventilation adequate to carry off all the grease fumes should be provided for all large ranges. All gas devices, even small hot plates in service kitchens, should be hooked up with rigid piping and properly insulated.

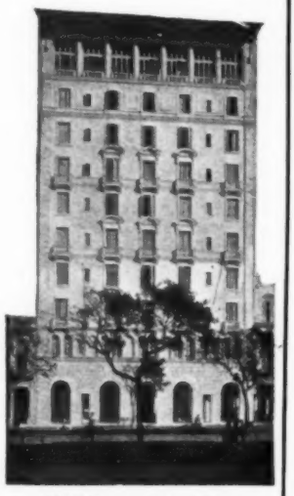
Fires have started from steam dryers in laundries, through woodwork or clothing being in contact with the hot steam pipes. Clothes dryers should be of metal throughout and steam pipes should be protected by wire screening. Gas mangles should be properly installed and the flames guarded. Where stoves are provided for heating irons, they should be carefully installed and attended. Pilot lights should be installed in circuits to all electric irons, and current should never be left on when irons are not in use. The use of gas irons should not be permitted. Non-combustible stands, with at least six inch clearance, should be provided for irons when not in use.

Paint shops if in the main building should contain a minimum amount of paints and oils. Cleaning paint brushes with gasoline should not be permitted. Standard waste cans should be provided for the reception of all

These fine new hotels have all installed VULCANS



Hotel Leamington, Oakland, California. New, luxurious and Vulcan-equipped. The accompanying photograph shows Leamington's modern kitchen and the battery of Vulcans.



Seville-Biltmore Hotel, Havana, Cuba. Not too far to be reached by Vulcan! Installation by W. J. Buzzini, Inc., New York.



Chastleton Apartment Hotel, Washington, D. C. Picturesque residential hotel served by Vulcan Hot-Top gas ranges. Installation by Dulin & Martin, Washington.



Kitchen of the Leamington Hotel

WHAT is the trend in the newest hotel kitchens? Look through the cosmopolitan centers of the East. Go South to Florida and Cuba. Inspect California's latest hotels. Everywhere you will observe the steady continent-wide tendency to select Vulcan heavy-duty equipment!

The chefs like the red hot spot. It gives them just the cooking surface they need. They have grown accustomed to grouping their pots around that spot. They depend on the graduated heat zones for better cooking results. They get these features in the Vulcan!

The patented aeration plate over each burner is one important reason for these better results. The four rings on the Vulcan mean perfect heat control and *lower fuel costs*. These features are exclusively Vulcan!

If you are planning a new kitchen, or re-equipping an old one, keep the Vulcan facts before you. Send for your free copy of the Vulcan book. Hotel Department, Standard Gas Equipment Corp., 18 East 41st Street, New York.

VULCAN GAS HOT TOP RANGES



Arlington Hotel, Washington, D. C. The Vulcans quickly won the kitchen staff's favor. Installation by The Stern Company, Washington.



Hotel George Washington, Jacksonville, Florida. Installation by John Van Range Co., Cincinnati, Ohio.



New Benjamin Franklin Hotel, Philadelphia, Pa. Battery of 31 Vulcan ranges, 3 ovens and 20 broilers. Installation by L. Barth & Company, New York.

STANDARD GAS EQUIPMENT CORPORATION

oily waste and rags. Carpenter shops should be kept clean and storage of excess lumber and awnings should not be permitted. Plumbers' and electricians' shops preferably should be in an isolated building and gasoline, necessary for blow-torches, should not be handled in the vicinity of any open flame. Refrigeration systems of any appreciable size should be in an isolated building.

The entire installation of x-ray machines should be under the supervision of experienced men. Only the approved type of slow-burning film should be used and the amount of this in both undeveloped and developed stock should be the minimum requirement, and this should be kept in approved cabinets or specially built vaults. If fast burning or nitro-cellulose film has been used at any time the storage of it in the hospital should be eliminated as soon as possible.

Supplies of ether, oxygen and nitrous oxid, and ethylene should be limited to such quantity as the exigency of the particular hospital will permit. Chemicals dangerous from a fire standpoint and usually found in a drug room should be kept under lock and key. The amount of volatile oils in test laboratories should be small. Rubber cement for mending rubber gloves or hot water bottles should be kept in small quantities in covered cans. Linseed oil mixtures should not be used for oiling floors as mineral oils are much safer, but the dressing of floors with any form of oil is a bad practice. Metal polishes, commonly used for brass polishing, are made up largely of benzine and gasoline and should be handled with care. Gasoline should never be used for cleaning purposes inside of buildings, and the main supply of gasoline, alcohol and other oils, paints and varnishes should be kept in an isolated building.

Stocks of cotton wool, cotton gauze, flannelette and cotton bedding should be stored in a place remote from all danger of sparks, and all large supplies should be kept outside of ward buildings.

All upholstering and refinishing of furniture should be carried on in an isolated building. Waste paper should be baled and removed from premises at frequent intervals.

Protection is the next important element of the risk.

Hose System Should Be Installed

Under private inside protection we have already recommended that a hose system be installed within the hospital. Chemical extinguishers should also be properly distributed. Ordinarily, one two and one-half gallon soda and acid appliance for each 2,000 square feet of floor area would be sufficient. If watchman service is installed, the watchman should be required to report on one or the other approved time detecting devices. The necessity of automatic sprinklers has already been discussed. Attendants should be trained in the use of all fire alarm systems, in the extinguishing of equipment and in all safety rules.

As to private outside protection there are few suggestions to offer, inasmuch as most hospitals are under fairly good public protection and as a rule there is no urgent need of a private fire hydrant system and fire corps.

As to private fire protection, outside hydrants and hose are of value only when there are persons present who are capable of handling them efficiently. Such protection generally is needed only for institutions outside of public protection zones. The details of water supply, pipe lines and water valves should, of course, be thoroughly understood by those who will use the hose. Special care should be taken to prevent freezing of hydrants and mains during cold weather. A fire, December 22, 1916, at the Kansas Masonic Home, Wichita, Kan., caused the loss of five lives and $250,000 property damage because water mains were frozen and the fire got beyond control. The protection afforded by a private water system for fire fighting where good public protection is not available has an important bearing on the insurance rating.

At all institutions where good public protection is not available it is important that fire brigades be organized and carefully trained. It should always be borne in mind, however, that in institutional buildings, fire fighting must come second to life saving. In some institutions a portion of the inmates are capable of rendering valuable aid, and this should be utilized in planning the exit and fire fighting organizations. In hospitals, the safety corps having charge of egress should be made up of doctors, nurses, porters and attendants, while the fire fighting brigade should be composed of the chief engineer, his assistants, mechanics, yard men and kitchen men.

The duties of the safety corps should be to respond to all fire alarms, treat and control patients, and remove them to places of safety when necessary.

The duties of the fire fighting force should be to respond to all alarms, use extinguishers, hose, and other equipment to best advantage, and, in emergency, assist the safety corps in removing persons from buildings.

Local Conditions Govern Details

Details of the organization must of course, be worked out to fit local conditions at each institution. All members of the safety corps should be able to turn in a fire alarm properly, and to use extinguishers on incipient fires. The organization of both safety corps and fire fighting force should be clearly shown and the detailed duties of each member clearly stated on signs posted at conspicious locations throughout the institution. These signs should also give information concerning the location and operation of fire alarm boxes and extinguishing equipment.

The fire fighting force should generally be in charge of the chief engineer, while the head doctor or head nurse should take charge of the safety corps. The superintendent of the institution should, of course, direct all activities, but he should be careful not to interfere with work which is already being efficiently carried out. At institutions where there is a scarcity of men, arrangements can sometimes be made with neighbors to respond to fire alarms and assist in the work. For the many institutions that are almost completely managed by women, arrangements of this sort are important. Directors, visiting physicians and others connected with institutions should be notified promptly at time of fire.

It is difficult to secure adequate facilities for combating fire in factories or other buildings where the occupants are physicially fit and mentally competent. The problem in buildings housing the sick and otherwise incapacited is infinitely harder. The conditions in institutional buildings generally are bad, frequently deplorable. The reason the life loss is not greater than it is does not lie in good buildings, adequate exits, good alarm systems, adequate fire protection, and trained staffs, but in the fact that such buildings are used continually, and fires are likely to be discovered in their early stages, and in that nurses and other attendants have shown remarkable heroism at time of crisis.

It is the difficulty and the expense of providing even reasonably adequate egress facilities in the ordinary institution that causes such emphasis to be placed in this article on fire prevention and on the installation of automatic sprinklers, for with such an installation properly maintained, the chance of a fire getting to the point where it jeopardizes life is exceedingly remote.

HOSPITAL DAY MAY 12th

Appropriate Occasion for Executives to Appraise Present Achievement and Further Needs

THE DESIGNATION of such a day gives some measure of emphasis to the growing importance in modern communal life of hospitals which *last year served* approximately *ten million* people in this country, or one person out of every three or four homes.



MARY FRANCES KERN

It is a proper time for the public to give serious thought to the vitally essential service of hospitals and gratefully contemplate the *protection* which they afford. To give the day the fullest value and significance, however, its observance should be *practical* as well as educational.

For those who are carrying the *responsibility* for the generai policies of hospital administration and development it is a *timely hour* to take account of their stewardship. Trustees and other directing officers of hospitals can well pause on Hospital Day to inventory the possibilities of their institution in relation to the community's needs. Is it adequate in *capacity?* Is it *complete* as to departments? Is it as *modern* in *equipment* and other respects as it should be?

If your hospital is not fulfilling its opportunity of service and protection to the community for lack of funds for necessary expansion and development there is usually a *way to provide them.* The surest way is through a popular subscription campaign conducted by organizers and publicity men *experienced* in fund raising projects.

Mary Frances Kern maintains a trained staff with years of successful experience in this field. The Kern organization can help you solve your problems. Let Hospital Day mark a milestone in your institutional history. Write for a conference appointment or wire at our expense.

MARY FRANCES KERN

Financial Campaigns

1340 Congress Hotel **CHICAGO**

WHAT DOES CARE OF THE PATIENT COMPRISE?*

By Francis W. Peabody, M.D.,
Boston

HOSPITALS, like other institutions founded with the highest human ideals, are apt to deteriorate into dehumanized machines. Even the physician who has the patient's welfare most at heart finds that pressure of work forces him to give most of his attention to the critically ill and to those whose diseases are a menace to the public health. In such cases he must first treat the specific disease, and there then remains little time in which to cultivate more than a superficial personal contact with the patients.

Moreover, the circumstances under which the physician sees the patient are not wholly favorable to the establishment of the intimate personal relationship that exists in private practice, for one of the outstanding features of hospitalization is that it completely removes the patient from his accustomed environment. This may, of course, be entirely desirable, and one of the main reasons for sending a person into the hospital is to get him away from home surroundings, which, be he rich or poor, are often unfavorable to recovery. At the same time it is important for the physician to know the exact character of those surroundings.

When a patient enters a hospital, one of the first things that commonly happens to him is that he loses his personal identity. He is generally referred to, not as Henry Jones, but as "that case of mitral stenosis in the second bed on the left."

There are plenty of reasons why this is so, and the point is, in itself, relatively unimportant. The trouble is, however, that it leads more or less directly to the patient being treated as a case of mitral stenosis and not as a sick man. The disease is treated, but Henry Jones, lying awake at night worrying about his wife and children, represents a problem more complex than the pathological physiology of mitral stenosis, and he is apt to improve very slowly unless a discerning intern happens to discover why it is that even large doses of digitalis fail to slow his heart rate.

Treat Not Only the Disease

Henry happens to have heart disease, but he is not disturbed so much by dyspnea as he is by anxiety for the future. A talk with an understanding physician who tries to make the situation clear to him, and then gets the social service worker to find him a suitable occupation, does more to help him than a book full of drugs and diets. Henry's case offers an excellent example of a certain type of heart disease, and he is glad that all the staff find him interesting; it makes him feel that they will do the best they can to cure him. But just because he is an interesting case he does not cease to be a human being with very human hopes and fears.

Sickness produces an abnormally sensitive emotional state in almost every one, and in many cases the emotional state repercusses, as it were, on the organic disease. The pneumonia would probably run its course in a week, regardless of treatment, but the experienced physician knows that by quieting the cough, getting the patient to sleep, and giving a bit of encouragement, he can save his patient's strength and lift him through many distressing hours. The institutional eye tends to become focused on the lung, and it forgets that the lung is only one member of the body.

But if teachers and students are liable to take a limited point of view even toward interesting cases of organic disease, they fall into much more serious error in their attitude toward a large group of patients who do not show objective, organic pathologic conditions, and who are generally spoken of as having "nothing the matter with them." Up to a certain point, as long as they are regarded as diagnostic problems, they command attention, but as soon as a physician has assured himself that they do not have organic disease, he passes them over lightly.

"There's Nothing the Matter With Her"

Take the case of a young woman, for instance, who entered the hospital with a history of nausea and discomfort in the upper part of the abdomen after eating. Mrs. Brown had "suffered many things of many physicians." Each of them gave her a tonic and limited her diet. She stopped eating everything that any of her physicians advised her to omit, and is now living on a little milk with a few crackers; but her symptoms persist. The history suggests a possible gastric ulcer or gallstones, and with a proper desire to study the case thoroughly, she is given a test meal, gastric analysis and duodenal intubation, and roentgen-ray examinations are made of the gastro-intestinal tract and gall bladder.

All of these diagnostic methods give negative results; that is, they do not show evidence of any structural change. The case is immediately much less interesting than if it had turned out to be a gastric ulcer with atypical symptoms. The visiting physician walks by and says, "Well, there's nothing the matter with her." The clinical clerk says, "I did an awful lot of work on that case and it turned out to be nothing at all." The intern, who wants to clear out the ward so as to make room for some interesting cases, says, "Mrs. Brown, you can send for your clothes and go home tomorrow. There really is nothing the matter with you, and fortunately you have not got any of the serious troubles we suspected. We have used all the most modern and scientific methods and we find that there is no reason why you should not eat anything you want to. I'll give you a tonic to take when you go home." Same story, same colored medicine! Mrs. Brown goes home, somewhat better for her rest in new surroundings, thinking that nurses are kind and physicians are pleasant, but that they do not seem to know much about the sort of medicine that will touch her trouble. She takes up her life and the symptoms return —and then she tries chiropractic, or perhaps it is Christian science.

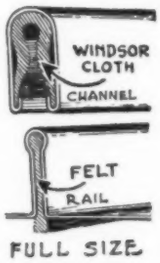
Now the chief criticism to be made of the way Mrs. Brown's case was handled is that the staff was contented with a half truth. The investigation of the patient was decidedly unscientific in that it stopped short of even an attempt to determine the real causes of the symptoms. As soon as organic disease could be excluded the whole problem was given up, but the symptoms persisted. Speaking candidly, the case was a medical failure in spite of the fact that the patient went home with the assurance that there was "nothing the matter" with her.

Here, then, was a patient in whom it was not the disease but the woman who needed to be treated. In general

*Excerpts from one of a series of talks before the students of the Harvard Medical School on "The Care of the Patient."

Athey Cloth-Lined Metal Weatherstrip

A Perfect "Seal" for Both Wood and Metal Windows

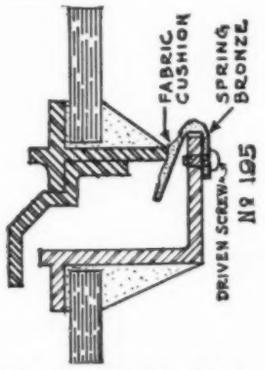


FULL SIZE

For wood sash. The channel is inserted in the edge of the sash and the rail nailed to the jamb.

The channel and rail are of zinc. They will not rust. The cloth is guaranteed to be rot-proof, water-proof and moth-proof—so crimped in that it can't pull out.

Inspection of many installations made as long as 10 years ago showed the cloth to be as good as the day it was installed, and the entire strip in excellent condition.



The same principle of cloth-to-metal is employed for steel sash (either rolled or hollow steel), and is the one truly efficient method for weatherstripping steel sash

Various tests have established the fact that the air leakage (during a 15-mile wind) through a window ***not*** weatherstripped amounts to approximately .75 cubic feet per minute, per lineal foot of perimeter. Thus, through an average window with 24 feet of perimeter, the air infiltration would amount to **18 cubic feet each minute.**

Think of the extra coal that must be burned to heat that steady infiltration of icy air. And think of the soot and dirt that sifts in—as well as the discomfort to the occupants of the room. There's no question about it—***it's economical to weatherstrip.***

Tests also show that of the various forms of weatherstrip the ordinary ***2-piece strip reduces that leakage to .29 cubic feet:*** While with a cloth-lined metal weatherstrip the **leakage is reduced to .08 cubic feet**—about one-ninth the amount that filters through a window not weatherstripped.

The Athey Cloth-to-Metal Contact makes an air and dust tight "seal"

You can't fit two pieces of metal tight enough to keep out drafts and dust, without making the windows stick.

But line the metal channel with cloth and you get a contact that defies 'most any drafts—yet the windows open and close easily. **That is the cloth-to-metal principle, patented by Athey, and so used only by Athey.**

Ask for particulars—also the names of some of the fine buildings where Athey Cloth-Lined Metal Weatherstrip saved enough coal to pay entire cost of installation in a year or two.

Athey Products
Perennial Window Shades
Cloth-Lined Metal Weatherstrips
Athey Disappearing Partition
Athey Skylight Shades

Athey Company 6052 West 65th St. Chicago, Illinois

In Canada: CRESSWELL-McINTOSH, Reg'd—270 Seigneurs St., Montreal, Que.

hospital practice physicians are so busy with the critically sick, and in clinical teaching are so concerned with training students in physical diagnosis and attempting to show them all the types of organic disease, that they do not pay as much attention as they should to the functional disorders. Many a student enters practice having hardly heard of them except in his course in psychiatry, and without the faintest conception of how large a part they will play in his future practice. At best, his method of treatment is apt to be a cheerful reassurance combined with a placebo.

The successful diagnosis and treatment of these patients, however, depends almost wholly on the establishment of that intimate personal contact between physicians and patient which forms the basis of private practice. Without this, it is quite impossible for the physician to get an idea of the problems and troubles that lie behind so many functional disorders. If students are to obtain any insight into this field of medicine, they must be given opportunities to build up this type of personal relationship with their patients.

Is Personal Relationship Possible?

Is there, then, anything inherent in the conditions of clinical teaching in a general hospital that makes this impossible? Can you form a personal relationship in an impersonal institution? Can you accept the fact that your patient is entirely removed from his natural environment and then reconstruct the background of environment from the history, from the family, from a visit to the home or workshop, and from the information obtained by the social service worker? And while you are building up this environmental background, can you enter into the same personal relationship that you ought to have in private practice? If you can do all this, and I know from experience that you can, then the study of medicine in the hospital actually becomes the practice of medicine, and the treatment of disease immediately takes its proper place in the larger problem of the care of the patient.

When a patient goes to a physician he usually has confidence that the physician is the best, or at least the best available person to help him in what is, for the time being, his most important trouble. He relies on him as on a sympathetic adviser and a wise professional counselor. When a patient goes to a hospital he has confidence in the reputation of the institution, but it is hardly necessary to add that he also hopes to come into contact with some individual who personifies the institution and will take a human interest in him. It is obvious that the first physician to see the patient is in the strategic position—and in hospitals all students can have the satisfaction of being regarded as physicians.

Here, for instance, is a poor fellow who has just been jolted to the hospital in an ambulance. A string of questions about himself and his family have been fired at him, his valuables and even his clothes have been taken away from him, and he is wheeled into the ward on a truck, miserable, scared, defenseless and, in his nakedness, unable to run away. He is lifted into a bed, becomes conscious of the fact that he is the center of interest in the ward, wishes that he had stayed at home among friends, and, just as he is beginning to take stock of his surroundings, finds that a thermometer is being stuck under his tongue. It is all strange and new, and he wonders what is going to happen next.

The next thing that does happen is that a man in a long white coat sits down by his bedside, and starts to talk to him. Now it happens that according to our system of clinical instruction that man is usually a medical student. Do you see what an opportunity you have? The foundation of your whole relation with that patient is laid in those first few minutes of contact, just as happens in private practice. Here is a worried, lonely, suffering man, and if you begin by approaching him with sympathy, tact, and consideration, you get his confidence and he becomes your patient. Interns and visiting physicians may come and go, and the hierarchy gives them a precedence; but if you make the most of your opportunities he will regard you as his personal physician, and all the rest as mere consultants.

Of course, you must not drop him after you have taken the history and made your physical examination. Once your relationship with him has been established, you must foster it by every means. Watch his condition closely and he will see that you are alert professionally. Make time to have little talks with him—and these talks need not always be about his symptoms. Remember that you want to know him as a man, and this means you must know about his family and friends, his work and his play. What kind of a person is he—cheerful, depressed, introspective, careless, conscientious, mentally keen or dull? Look out for all the little incidental things that you can do for his comfort. These, too, are a part of "the care of the patient." Some of them will fall technically in the field of "nursing" but you will always be profoundly grateful for any nursing technique that you have acquired. It is worth your while to get the nurse to teach you the right way to feed a patient, change the bed or give a bedpan. Do you know the practical tricks that make a dyspneic patient comfortable? Assume some responsibility for these apparently minor points and you will find that it is when you are doing some such friendly service, rather than when you are a formal questioner, that the patient suddenly starts to unburden himself, and a flood of light is thrown on the situation.

Win the Patient's Confidence

If the establishment of an intimate personal relationship is necessary in the diagnosis of functional disturbances, it becomes doubly necessary in their treatment. Unless there is complete confidence in the sympathetic understanding of the physician as well as in his professional skill, very little can be accomplished. But granted that you have been able to get close enough to the patient to discover the cause of the trouble, you will find that a general hospital is not at all an impossible place for the treatment of functional disturbances. The hospital has, indeed, the advantage that the entire reputation of the institution, and all that it represents in the way of facilities for diagnosis and treatment, go to enhance the confidence which the patient has in the individual physician who represents it. This gives the young physician a hold on his patients that he could scarcely hope to have without the support of the hospital. Another advantage is that hospital patients are removed from their usual environment, for the treatment of functional disturbances is often easier when patients are away from friends, relatives, home, work and, indeed, everything that is associated with their daily life. It is true that in a public ward one cannot obtain complete isolation in the sense that this is a part of the Weir Mitchell treatment, but the main object is accomplished if one has obtained the psychologic effect of isolation which comes with an entirely new and unaccustomed atmosphere. The conditions, therefore, under which you, as students, come into contact with patients with functional disturbances are not wholly unfavorable, and with little effort they can be made to simulate closely the conditions in private practice.

FEDERAL WATER TUBE STEEL BOILER

Costs Less to Buy—Costs Less to Install—
Costs Less to Operate—Compare These Points

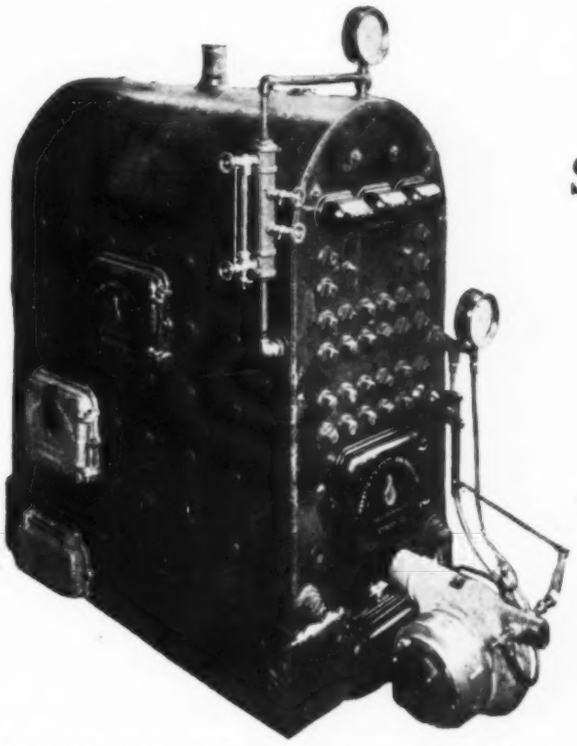
Burns Oil (18 Gravity)

Burns Coal

Burns Garbage

All at One Time if Desired

Eliminates Tank and Heater



The Federal is equipped to burn coal without oil burner if desired

Saves Fuel

Saves Equipment

Saves Water

Saves Space

All Sizes for All Purposes

Cheaper Than Coal

The Federal All Steel Water Tube Boiler contains all the principles of the latest and most efficient water tube boilers in practical use today. It generates steam most economically.

HOW THE FEDERAL SYSTEM HEATS WATER IN SUMMER. Remember that with the independent water heater, constant shoveling of fuel is necessary to maintain a hot water supply. With the Federal installed in your institution all that is necessary is to close the main steam and return valves of the boiler. The fire produced by the burning of garbage insures a constant supply of hot water daily—with only a slight addition of fuel. With the water in the boiler at 190° F., the Federal system will supply hot water at no less than 150° F. At no time under these conditions will the temperature of the hot water supply be less than 120° F.

Write for specifications and details of construction.

Sole Distributors—THE HANNA COMPANY

506 S. Wabash Ave. **CHICAGO**

For complete index of advertisements refer to the Classified Directory

WHAT ARE THE MINIMUM REQUIREMENTS FOR A CLINICAL LABORATORY?

AT THE hospital standardization conference of the American College of Surgeons, held at Montreal, October 26, 1926, the board of regents of the college authorized minimum standard requirements for the clinical laboratory in an approved hospital. These now become part of the general minimum standard requirements of the hospital standardization program, and are as follows:

1. The director of the clinical laboratory shall be a graduate of an acceptable college or university of recognized standing, and shall have had adequate training in clinical pathology or allied subject. In case the director is not a physician there shall be attached to the laboratory a graduate in medicine competent to render diagnoses on pathological conditions.
2. Clinical laboratories shall be prepared to perform satisfactory work in
   a. Pathologic anatomy, gross and microscopic.
   b. Bacteriology and parasitology.
   c. Serology.
   d. Hematology.
   e. Chemical and morphologic examinations of other body fluids, exudates, transudates, and excreta.
3. All tissues removed at operations showing pathologic conditions shall be examined in the laboratory and reports rendered thereon.
4. A readily available copy of all reports shall be filed in the laboratory and one with the patient's record. In pathological anatomy there shall be in the laboratory a cross index of, at least, the name of the patient, of the hospital or laboratory number of the patient, and of the lesion or organ. There shall be preserved also for at least three years either a section, imbedded tissue, or gross tissue from each case from which tissue showing pathologic change is removed.
5. A uniform system of charges for laboratory work shall be enforced.
6. The clinical pathologist shall attend the monthly staff conference of the hospital.

The college believes that the supervision and direction of the work of the clinical laboratory can be done efficiently only by a well trained, competent, clinical pathologist, part or full time, depending on the nature and amount of work to be carried on. In smaller hospitals where it is not feasible to have full time clinical pathologists, the best present solution of the problem is the grouping of hospitals under one clinical pathologist, providing sufficient technical service in each institution to do the work efficiently. In the smaller hospitals a member of the medical or surgical staff of the hospital, who has had training in clinical pathology, may be assigned for supervision of the work of the clinical laboratory.

It is required that facilities be available within the hospital for the ordinarily required examinations of urine, blood, sputum, smears, and spinal fluid cell counts. The more elaborate histopathologic, bacteriologic, biochemic, and serologic examinations may be performed outside of the hospital. If this work is arranged for with a so-called commercial laboratory, such laboratory shall be one approved by the Council on Medical Education and Hospitals of the American Medical Association.

In such a case duplicate reports shall be sent to the hospital, one to be filed in the laboratory and one with the patient's record. In the case of tissues, a section showing the lesion diagnosed shall be filed in the hospital laboratory.

The American College of Surgeons deems it expedient that all tissues removed at operations showing pathologic conditions, shall be examined in the laboratory and reports rendered thereon, in order that there may be cooperation between operator and pathologist. This makes possible more accurate final diagnoses and allows the surgeon to share with the pathologist a knowledge of the operations performed.

Aside from the purely academic value of requirement No. 4, it serves the purpose of supplying data as to the amount of work done by the laboratory and of having histologic material available for re-study in the light of subsequent developments of the case. The arbitrary period of three years is selected as one that will not throw an undue burden on the laboratory and one within which most of the subsequent pathologic events will happen in the majority of cases.

There is widely diversified opinion as to the best system of laboratory charges for a hospital to adopt. A review of the situation has indicated the following methods in use at present:

a. Adoption of a schedule of charges for the various tests performed, varying according to the nature of the examinations.
b. Inclusion of this service in the per diem rate charged to the patient.
c. Adoption of a flat rate to include all the laboratory work.
d. Providing a flat rate for some of the routine work, and making a charge for all other examinations required.
e. Providing a free service, as might be granted through the federal, state, county, or endowed laboratory.
f. Turning of the work over to a clinical pathologist who secures part or all of the fees and provides the necessary free service.

The American College of Surgeons has not recommended any particular system, but urges that whatever method is used, it should not limit or embarrass the amount of work called for and required in the best interests of the patient. It is hoped, however, that the near future will see a more uniform policy of charges worked out for hospitals.

It is required that the clinical pathologist shall attend the monthly staff conferences of the hospital. This is for the purpose of maintaining as close a contact as possible between the clinical pathologist and the medical staff, the advantages of which are obvious.

HOUSECLEANING THE ICE BOX

The steward of a Minnesota hospital has all his refrigerators gone over thoroughly every spring. The inside of each box is washed with boiling water, thoroughly dried and then painted with white enamel. The outside is also cleaned and given two coats of varnish. In addition to the better appearance, he has found that this practice also has enabled him to save on the ice bills.

Dr. Edwin C. Ernst Selects Barium Sulphate Plaster

Equips new Beaumont Building in St. Louis with this material that stops X-rays

THROUGHTOUT the radiological and therapy departments of the new Beaumont Building, Dr. Ernst—President-elect of the Radiological Society of North America—has used Barium Sulphate Plaster to stop X-rays and the gamma rays of radium.

This remarkable plaster has well demonstrated its ability to stop these powerful rays. X-ray rooms in many hospitals and doctors' offices are being lined with it.

Barium Sulphate Plaster forms an impenetrable barrier to X-rays—a barrier unbroken by any joined surfaces or cracks. No rays can leak through into adjacent rooms. Plates may be safely stored within easy reach of the X-ray installation.

Barium Sulphate Plaster combines appearance with absolute protection. It can be painted without difficulty. It is applied just as ordinary wall plaster is applied. And it is less expensive than old methods of protection.

Write for the formula. The right mix is of first importance. Upon request we shall send the formula for mixing the barium sulphate, the barium sand and cement in just the right proportions. (Process patented.) We include an installation license free of charge when the barium products are purchased from us.

THE DICK X-RAY COMPANY
Home Office—3974-76 Olive Street, St. Louis, Mo.

BARIUM SULPHATE PLASTER

For X-ray-proofing Walls, Ceilings and Floors

The Modern Method of Handling Chart Records

The C. A. 6 Visible Clinical Chart Desk shown at the right is 32″ high, 37″ wide, and 19½″ deep. It is equipped with Thirty Special Noiseless Aluminum Chart Holders.

No other hospital item in recent years has been so favorably received and so quickly adopted as the "FOSCO" Visible Clinical System of handling Chart Records.

This system is accurate—quick—noiseless—safe, and has brought added efficiency to every Hospital in which it has been placed.

In this System all name plates are visible—seen at a glance—and all opportunity for mistakes and delays eliminated.

The new "FOSCO" Aluminum Chart Holders used in these racks are easy to open and close, and are absolutely noiseless. A great improvement over the old type.

This Desk is made in tubular construction and is full acetylene and electro welded.

This Desk has two commodious drawers and is mounted on 3″ felt casters.

The tops of these desks are covered with polished plate glass, battleship linoleum or Bakelite as desired.

Write today for prices



Visible Clinical Record Chart Desk C.A.6

32 in. high, 37 in. wide, 19½ in. deep

To Hold Thirty Special Noiseless Aluminum Book Form Chart Holders

Rack size 29⅞ in. wide over all; 10 in. deep

F. O. SCHOEDINGER *Manufacturer* Columbus, Ohio

For complete index of advertisements refer to the Classified Directory

WHAT DIFFERENT STATES HAVE DECIDED ABOUT THE LIABILITY OF CHARITABLE HOSPITALS*

THE liability of charitable hospitals for the negligence of employees has come to be a subject of widespread interest since cases involving charitable hospitals are constantly being brought up before courts of the various states. Where charitable corporations are established by gifts of individuals and are not in any sense state institutions, judicial answers regarding responsibility for negligence of their physicians and nurses are quite at hopeless variance.

Some states hold them liable; others give them immunity. New York and New Jersey are among the latter class. The reason advanced for this in the case of New York is that the charitable bequests upon which such institutions operate would be thwarted and trust funds of such corporations would be diverted from the beneficent purposes for which they were intended, if such institutions were held liable in tort for the negligence of their employees. Thus it is the policy of the New York courts to say that the wrongdoer and not the fund must respond in damages for injuries sustained by patients.

New York and New Jersey Laws Similar

In the leading New York case of Schloendorff versus the New York Hospital (211 N. Y., 125) the New York Court of Appeals declared that the relation between a hospital and the physicians and nurses therein is not one of master and servant; that a hospital maintained as a charitable institution is not liable for the negligence of its physicians and nurses in the treatment of patients, and that it remains exempt from liability, although the patient makes some payment to help defray the cost of his hospital treatment.

The same decision is followed by the court of New Jersey in the case of D'Amato versus Orange Memorial Hospital (127 Atl. Rep., 340). The Court of Errors and Appeals of New Jersey held that public policy requires that a charitable institution maintaining a hospital be held not liable for injuries resulting to patients through the negligence or carelessness of its physicians and nurses, even if the injured person happens to be a pay patient. This conflict is well exemplified by a recent decision of Roberts versus Ohio Valley General Hospital (127 Southeastern Rep., 319). In this case an action was brought by a patient for negligent treatment received in the defendant hospital. The facts are no different from those in the New York and New Jersey cases above.

The Supreme Court of Virginia exhaustively discussed the viewpoints of the different courts of the country on this subject and finally came to the conclusion that for the protection of patients the best rule to adopt in that state was that the hospital is liable for such negligence where it fails to use reasonable care in the selection of its physicians, nurses, and attendants.

The court stated that in order that the high purpose of the donors of a charitable hospital may be best served and to prevent as far as possible human suffering from acts of negligence or incompetence, it would seem imperative to require of those in charge of the hospital reasonable care in the selection and retention of employees.

In commenting upon a similar case in West Virginia, the court stated: "The exact question involved in this case has never been determined. But generally speaking, there are three lines of decisions in this country. (1) A few courts have held a charitable institution equally liable to a pay patient for the negligence of an employee as an institution conducted solely for profit. (Tucker versus Mobile Infirmary Association, 191 Ala. 572, 68 So., 4, L. R. A., 1915 D, 1167.)

"(2) Another line of decisions, quite respectable in authority and number, have exempted charitable institutions from any liability whatsoever for the negligence of its employees. In some cases it is held that as contributions are made for the specific purpose of beneficience, the fund so established must be held inviolate for the purpose of the trust and cannot be diverted to the payment of judgment for torts. Some opinions regard the acceptance by the patient of the benefit of the charity as an implied waiver of any claim for neglect. Other courts have exempted charitable institutions on the theory that the rule of respondent superior is a hard rule at best, and should not be applied except in cases where the service bestowed by the employee yields a profit to the employer.

"(3) By far the most generally accepted theory is that a charitable hospital should not be held liable for the negligence of employees when reasonable care has been used in their selection and retention. These decisions are generally based on public policy. The law in this respect is fairly stated in 11 C. J., 377, par. 108:

"'Except in some jurisdictions it is a rule that those who furnish hospital accommodations and medical attendance, not for the purpose of making profit thereby, but out of charity, or in the course of the administration of a charitable enterprise, are not liable for the negligent or other tortious acts of physicians, nurses, attendants, or other persons in their employment or service, but only for their want of ordinary care in selecting them. Also, except in some jurisdictions, the same rule applies where the plaintiff has paid for the services rendered, where the amount received was not for private gain but to accomplish more effectually the purposes for which the charity was founded.'

"Public policy demands that charitable institutions be fostered and preserved. To this end the law should deal with them more leniently than with institutions conducted solely for private gain. No matter how strict a rule might be enforced against institutions of this nature, mistakes in treatment would occasionally happen. Employees and servants selected with ordinary care, however, will execute the charity with but few mistakes.

"In some cases the will of the donors is thwarted instead of being carried out, when the object of their beneficence suffers from neglect. When administered by incompetent servants, charity, instead of being a great boon to humanity, may become a menace. One who enters a hospital expects, and has a right to expect, more skillful treatment than is obtainable in the home. If such institutions be not held to reasonable care in the selection of their employees, confidence in their efficacy will be shaken. Many who need will fear to accept hospital treatment and those who do apply therefor will lack the faith therein that is so frequently half the battle in the contest with disease.

*Abstract of an article from the New York Law Journal.

Save Money in Your Laundry



Save 5 Ways

1 Cost of Equipment
2 Installation Expense
3 Operating Expense
4 Wages
5 Make linens last 65% longer

EVERY hospital can save money by installing Thor Hospital Laundry Equipment. The table below shows you that one, two or more Thor Hospital Washers can easily handle all the washing for a small or average size hospital, depending on the amount of your laundry.

Large hospitals, too

But even the largest hospital as well — those with complete, elaborate built-in laundries — are profitably using Thor Hospital Washers for their finer, more expensive linens, counterpanes and curtains. Also as auxiliary equipment in operating rooms, in nurses' homes, for dining room linens, etc., of the hospital staff. And for quick, emergency calls at any time for freshly laundered supplies.

Cost of equipment

You'll be pleased to find how much Thor equipment saves you over the cost of a built-in laundry. But bear in mind that these are not home-type machines. They are especially made, heavy duty, continuous service machines, made to give guaranteed satisfactory service under most strenuous conditions. Send for prices.

Installation expense

There is none! No shafting, pulleys, etc., are required. They are portable and take little space anywhere. Just attach to any electric convenience outlet and put to work.

Operating expense

At a hospital electric rate of 5c per kilowatt hour, the cost of operating a Thor Hospital Washer for a full eight-hour day will be only ten cents. Your savings will soon pay back the moderate cost.

Save in wages

Any unskilled help can successfully operate Thor Hospital Washers and Ironers. They require no experience to use. Everything is simple and foolproof.

Save money by saving linens

Hospitals doing their laundry this way have found that their linens are lasting 65% longer. Of course they would! Thor's washing method is the highest development of the famous, gentle cylinder principle. It is fast, thorough and saves clothes. In fact, Thor's refinement of the cylinder washing method is now used by dry cleaners everywhere. It will save *your* linen replacement costs. Furthermore, you can cut down your linen supply one-third, because of the quick service available at any time.

Mail the coupon

Without the slightest obligation on your part we will be glad to send detailed information, low costs, etc.

HURLEY MACHINE COMPANY
Manufacturers of special laundry machines for laundries, hotels, hospitals, institutions, etc.
22nd St. and 54th Ave., Chicago, Ill.
Branches and Service Stations in Principal Cities



Thor Hospital Ironer

Furnished in two sizes, for gas, gasoline or electric heat. Built for continuous heavy-duty hospital service. Requires no skill in operation. The user merely sits before the ironer and guides the pieces through. No pedals or levers to operate. Everything is simple and entirely automatic.

Capacity per 8-hour day, Thor Heavy Duty Washer
2,952 Napkins or
2,160 Hand Towels or
1,368 Pillow Cases or
696 Bath Towels or
384 Single Sheets
or any combination of foregoing or other articles to equal 432 lbs., dry weight, per day.

Thor
HOSPITAL
LAUNDRY EQUIPMENT

HURLEY MACHINE COMPANY
Dept. 765, 22nd St. and 54th Ave., Chicago, Ill.

Please send full information, prices, etc., on Thor Heavy Duty Hospital Laundry Equipment.

Name .....

Hospital .....

Address .....

For complete index of advertisements refer to the Classified Directory

NURSING AND THE HOSPITAL

Conducted by M. HELENA MC MILLAN, R. N.,
Director, School of Nursing, Presbyterian Hospital, Chicago

WHY YOUNG WOMEN BECOME NURSES

By George B. Landers, M.D., Superintendent, and Lillian A. Douglas, R.N., Directress of the School of Nursing, Highland Hospital,
Rochester, N. Y.

SHORTLY after a preliminary class enters Highland Hospital, Rochester, N. Y., each member of the class is asked to answer in writing the two following questions:

1. Why did you decide to take up nursing as a profession?

2. Why did you decide to come to Highland Hospital for your training?

A twofold reason is behind this procedure. First, it is desired to ascertain the reasons that influenced the candidate to take up nursing as a life work and to learn whether the step was the result of sound reasoning and deliberate thought or of some impulsive decision or fanciful idea. Second, the hospital, early in the student's career, desires to gain some idea as to the desirability of the candidate. It is thought best that these questions should be answered soon after the student's admission to the class so that fundamental facts may be learned while the student is still uninfluenced by association with new companions and new conditions.

Finding the Selling Value of the Course

The reason for asking why this particular hospital was chosen is also twofold: First, to find out if possible why the Highland Hospital was decided upon, what influences are being employed in its favor and the selling value of the three-year course of training in force here, as against the shorter courses offered elsewhere, about which so much has been said and written. Second, the question is asked so that at least twice each year we may take stock, analyze the standing and reputation of our school of nursing, and, by learning the opinions of others, know whether it is advancing, standing still or deteriorating. In other words, the whole plan is designed to ascertain if the student's choice has been made because of the standing of the hospital in the community, and whether her mental attitude toward the profession of nursing signifies that the choice of the profession has been a wise one.

If the answers to the questions do not show the right attitude of mind and if the decision is apparently not based upon logical reasoning it is better to learn the facts early in the student's career and not encourage her toward something for which she is obviously unfitted or unqualified. It is our conviction that care in the selection of students at and during this preliminary period will obviate much of the difficulty so often experienced during the later stages of training. It is better frankly to advise the adoption of another vocation when it is apparent that the fundamentals of stability and perseverance are lacking, and to do this during the early stages of training, rather than to encourage continuance in the school in the hope that later on a better mental attitude may develop. It is an established fact that an ill equipped student or one who has not the proper mental attitude toward nursing is a liability and not an asset, and that it is from this group that trouble may be anticipated.

Care in Selection of Students Essential

We are of the opinion that by exercising care in the selection of students, by insisting upon certain basic initial requirements and by providing competent experience and training while in the hospital, the end product will reflect credit upon the hospital and be of benefit to the community.

Since this program has been in force it has, of course, been interesting to note its effect upon the number of applications from prospective students coming to the school, and to analyze the character of the applications from an educational standpoint. While the requirements of New York State specify that one year of high school or its equivalent is all that is actually needed, still it cannot be denied that greater preliminary education offers much to be desired and it is to this phase of the problem that attention is invited, as illustrated by the following table covering the past four years. It will be noted that the number of high school graduates has increased year by year and that those of the inferior grades of elementary education have in like manner decreased. It will be noted, too, that the increase in the number of applications has taken a gradual and healthy course, and does not indicate anything of a spasmodic nature as the result of special effort on the part of the hospital.

	1923	1924	1925	1926
Letters of inquiry received	237	275	297	365
Number of nurses in training	80	81	91	97
Analysis of nurses in training:				
High school graduates	33	54	71	77
High school 3 years	3	3	6	10
High school 2 years	13	8	10	4
High school 1 year	25	14	1	3
Equivalent to one year	6	2	3	3



Try
SEAFRESH
FROSTED FILLETS
and
FROSTED SEALOAF

Seafresh fish—a hospital food

REPRESENTATIVE hospitals are using *Seafresh*, for it is new and convenient and reliable. You have always wanted a nice tasty fish dish for your patients—but it has always been about the hardest thing to get. With *Seafresh* you can have it *every* day—and always be sure of perfect quality.

Fresh Atlantic Ocean fish, cleaned, boned and packed into standard one and five-pound cartons. Our new patented "frosting" method holds the nutriment and flavor intact and brings the fish to you all ready to cook.

Send now for complete information about *Seafresh Frosted* Fillets and *Frosted* Sealoaf. See for yourself how this new fish will save you time and money and will delight your patients.

GENERAL SEAFOODS
CORPORATION
GLOUCESTER, MASSACHUSETTS

SEAFRESH

GENERAL SEAFOODS CORPORATION
Gloucester, Mass.

Gentlemen:
Please send me all information about Seafresh.

Name.....

Address.....

.....

MH4

For complete index of advertisements refer to the Classified Directory

To illustrate the meaning of the program and its actual workings, excerpts from papers written by the preliminary class have been made and are presented to show the feasibility of the plan. They have not been selected for any especial reason other than that they were full and intelligent replies:

"I decided upon this hospital because I had heard it was one of the best in this part of the country and because it was conveniently near to my home. A physician in the ———— Hospital in Pennsylvania told a Rochester girl that she had made a mistake in passing up this hospital when she finally decided upon the Pennsylvania institution."

"I was called upon at one time to help in caring for a patient who had rheumatism. She was confined to bed and needed someone to care for her. I did not know much about what to do for her but by asking the doctor several questions and by noting the effect of things I did for her I felt I was helping and so became interested in nursing. I am interested in knowing how to relieve suffering and why we get certain diseases. I felt that by learning to be a nurse I should be able to do my part for the world in general."

"I came to Highland Hospital because it is the hospital where most of my relatives and friends have been as patients. By coming to see them I grew to like the hospital."

"I chose this hospital because my aunt graduated from here several years ago and also because my doctor recommended it. He told me that this institution had probably the best school of any hospital in this part of the state and that I could not choose a better school in which to take my training."

"I chose Highland Hospital because our family doctor is, I believe, connected with the hospital. At the time of my sister's death we had a nurse from this hospital and we all liked her immensely. My mother was recently a patient in the Highland Hospital and many of my friends and relatives have been here, and we were satisfied and pleased with the care and attention shown them."

"I came to this hospital because I had heard from reliable sources about its standing in Rochester. I chose it instead of a smaller one nearer my home because I thought I should receive better training here."

"At various times I have come in contact with people who were quite ill and when I saw how much a nurse could relieve and comfort the sick the thought came to me that it would be wonderful to be able to be of service to people who were ill and in need of proper care. Nursing has always appealed to me as a most interesting profession."

"I had several friends who were graduates of Highland Hospital and they recommended my entering this hospital for training. Before mailing my application I made several inquiries regarding other training schools and reached the conclusion that Highland offered the most modern and the most thorough training of any school that I had made inquiries about."

"I think my main reason for choosing this hospital was the influence of my Sunday school teacher. When she heard I wished to become a nurse she talked to my mother and myself about Highland. I thought of applying to the ———— Hospital but after considering both I decided that the three-year course offered here would be better than the shorter course offered at the other hospital."

"In the first place my physician advised me to come to this hospital. He told me that he thought it had the best standing and the best location of any hospital in the city, and as far as I could find out in other ways this hospital seemed to be the best and to appeal to me most."

"When I first thought of studying nursing I tried to decide the hospital I should like best and wrote for information and pamphlets from different hospitals. The advantages of the courses that Highland offered appealed to me most. I went to our family physician and obtained his opinion and advice which was in favor of this hospital."

"I chose Highland Hospital because my sister was in training in this hospital. She had visited a friend in training at another hospital and found the methods at Highland were preferable."

"My mother is a graduate nurse and has been a superintendent of nurses so naturally my thoughts turned toward this channel first. Mother and I read and discussed the announcements of more than twenty schools, considering carefully their advantages and disadvantages in the matter of length of training, nearness to home, reputation of graduate nurses and other things. Then came the difficult choice of a hospital. I talked with a friend who is in training here and she was most enthusiastic over the school. Then Miss ———— suggested that I first take the course here and then go to college and prepare to teach the theoretical side of nursing. I can never fully express my appreciation for the suggestion. I had given up the idea of college but now see that not merely a nursing course, not merely a college course, but the two combined make a life of service more possible."

"I think that the recommendations about this hospital, received from people whom I knew and whose opinions I valued influenced me greatly in my selection."

"After spending about six months in bed with a graduate of this hospital for a special nurse I decided it must be a wonderful place where one is taught kindness, thoughtfulness and above all else, conscientiousness."

What the Answers Reveal

From these answers it will be seen that there are many outside influences at work for or against a hospital. The influence of the school nurse, the physicians on the staff, and the very definite impression the graduate nurses make when called into the homes, the influence of reading about the hospital and the many other things mentioned all are major factors for consideration.

It must not be understood, however, that all the answers are of the same order. Some have stated that all their relatives and friends, including school teachers, have tried to discourage them from taking up nursing and have spread a certain amount of propaganda against the profession generally. Some have replied that they have taken up the work solely because it would make them better wives and mothers. A few have stated that they were attracted to the profession because of the excellent pay a nurse receives. It is significant to note, however, that these latter replies came from those residing in the smaller towns and from those of inferior educational requirements.

From this analysis two outstanding features are apparent: First, the necessity of insisting that the graduates of this school be well trained if the good impression of



For Tired Eyes

SOL-LUX Luminaires produce a mellow, glareless light, light that is kind to the eyes of recuperating patients. This unit is so constructed to produce light that reaches every corner—eliminating every shadow—and yet light that is comfortable.

Easy to Clean

Sol-Lux equipped hospitals find little difficulty in keeping lighting fixtures clean. The Sol-Lux globe is tight fitting—greatly reducing the dirt that collects inside the globe of the ordinary lighting unit.

Sol-Lux Luminaires require little attention. Cleaning the globe means simply going over the outside occasionally with a damp cloth. The tilt-out cap saves time in changing lamps—saves money, also, because the simpleness of the operation reduces the breakage of lamps and globes to a minimum.

Westinghouse Electric & Manufacturing Company
Merchandising Department
South Bend Works South Bend, Indiana

Westinghouse

X92720

the hospital apparently already established is to be maintained and, second, that the care given patients while in the hospital is reflected throughout the entire community, and that good care and humane consideration of patients has been responsible for attracting many students to this institution.

Endeavoring to give the best treatment to those in the hospital, striving to make the three-year course of training attractive and yet thorough, and gaining the respect of the medical profession for our graduates, have all helped toward eliminating that specter of so many hospitals—a shortage of student nurses. Experience has shown that the student with the full high school training will probably sense the responsibilities of her calling better than the one with lesser educational advantages. Yet adhering to the state requirement of one year high school or its equivalent does allow us to select the exceptional candidate falling short of the full high school education but otherwise qualified temperamentally and physically for admission to the school. Maintaining a certain fixed percentage of the fully trained students, and leaving a leeway for those not so well trained, seems to balance the entire school and stimulate the group to come up to the standards of nurse training established in this school.

HOW THE NURSE MAY SELL SERVICE

Discussing the important role that the nurse plays as one of the most important of the hospital's publicity forces, a superintendent recently remarked that one nurse could do more to destroy the morale of the hospital and its public relationships than half a dozen laymen coming into the institution.

He pointed out that most of the friction in a small hospital could be avoided if the nurse had a psychological conception of the people's reactions under abnormal conditions, since nothing impresses people more than the nurse's understanding of their relations at such times. If the nurse realized that the members of the patient's family are not their normal selves under the stress and worry of illness and if she were able to bear with them she could make of that family life-long friends of the institution.

In order that the nurse may fulfill her mission as the most intimate contact between the hospital and the public, he believes that she should be taught psychology, both normal and abnormal, so that she may be able to realize that patients' reactions are not normal and that their unreasonable demands are but a part of their illness. Similarly, the nurse should be taught that the reactions of the patients' families are often the result of worry and, accordingly, she should exercise the greatest care and sympathy in dealing with them. He concluded by saying that a nurse who has a heart and a soul and who will be courteous to patients and visitors is the greatest salesman for any hospital.

AMERICAN NURSES INTRODUCE SANITATION IN A BURMESE HOSPITAL

An interesting experiment in medical missionary work is being carried on in the Roman Catholic Missions of Bengal and Burma in the Government Hospital of Aykab, in the province of Arakan, Burma. There, a group of American women, all graduate nurses, are engaged in presenting modern hospital methods and prophylaxis to the natives. Aykab is a tropical seaport of the Bay of Bengal with a native population of 40,000.

According to the account of their experiences in this hospital, published in a recent issue of the *Trained Nurse and Hospital Review*, the American nurses found the primitive conditions prevailing at this hospital rather startling in contrast to the highly standardized institutions in the United States.

What the Missionaries Report

The young missionaries reported that the institution seemed dirty and disorderly to a westerner. The wards were strident with the shouts of native doctors whose methods of summoning their subordinates and issuing instructions were to yell lustily from one end of the long room to the other.

Hampers overflowing with soiled linen, stale cigar and cigarette stubs and remains of food stood about in the open. The red tiled floors were patterned by the muddy traces of thousands of bare feet. Window sills were indiscriminately utilized for open medicine cabinets and catch-alls. Bottles of deadly drugs were hobnobbing with surgical dressings and edibles brought in by the relatives of the patients. The walls had originally been white but were stained to the height of a man's head with an indescribable muck which was constantly increased by the universal custom of the patients of both sexes of spitting on the walls.

Indian types of beds were in order, low, springless, mattressless, and painted a dark green. They were covered with red blankets. The American nurses shuddered. As much to keep up their spirits as in the cause of sanitation they inaugurated a carnival of housecleaning.

USE MODERN HOSPITAL FOR TEXTBOOK

"We are trying to bring our school up to the mark along educational lines, and have adopted THE MODERN HOSPITAL as one of our textbooks," stated Alice M. Powell, principal, school of nursing, Sleeper Davis Memorial Hospital, Peking, China, in a recent communication inclosing the accompanying picture of a group of the freshman class.



The Sleeper Davis School was organized twenty years ago and has steadily progressed until it is one of the leading schools in China, according to Cora E. Simpson, general secretary, Nurses Association of China, in her recent book, "A Joy Ride Through China for the N. A. C." At present the school has an enrollment of fifty students and about twice that number have graduated and are now doing missionary work in other parts of China.

A recent gift from the China Medical Board is helping in the development of the school under Miss Powell, who was one of the first presidents of the Nurses Association of China and has made a great contribution to the cause along all lines, according to Miss Simpson.

A *dainty* peach dessert to please critical patients

Tempting goodness added so easily to your trays

TO top off a tray, especially for patients who are a bit "cranky" about their food, dietitians in one of Chicago's famous hospitals often turn to Peach Delight. This light cake with its dome of golden peach adds a festive touch that pleases the most finicky appetite.

In the fruit trimming lies the appeal of this simple, inexpensive dessert. To make certain of full-ripe flavor and beauty, many dietitians are careful to use Libby's California Peaches. All the flavor of fresh fruit is in Libby's Peaches, packed on the day of perfect ripeness in the midst of California orchards where they grow.

You will find the same goodness in all of Libby's 100 Foods. In the world's finest producing regions, Libby has established more than 50 kitchens to pack the choice part of each crop just when it reaches natural perfection.

For your trays, Libby's 100 Foods will give you appetizing flavor and variety. A partial list is shown below. Ask your jobber about them.

Libby, McNeill & Libby
Dept. N-3, Welfare Bldg.
Chicago



Peach Delight adds a colorful touch to a tray. It is easily made as follows:

1 cup soft butter	5½ tablespoons baking powder
½ cup sugar	4 cups milk
4 eggs beaten separately	1 tablespoon vanilla
8 cups pastry flour	Libby's Peaches (halves)
1 teaspoon salt	

Cream butter and sugar. Add egg yolks. Sift dry ingredients together, beat into mixture alternately with milk. Fold in egg whites and vanilla. Pour into well greased muffin tins, allowing one spoonful for each cake. Drain Libby's Peaches, dust bottom with flour and place a half on top of each portion of batter. Bake in hot oven (400 F.) 30 minutes. (Serves 40)

Something new for special diets

So hard to obtain—variety in special diets! For the high calory diet, nephritic diet, hyper-tension diet and the post operative soft tray, try Peaches en Crème. Soak 2 tablespoons gelatin in ¼ cup cold water, then dissolve in ½ cup boiling water. Add 2 tablespoons lemon juice, 2 tablespoons sugar, 2 cups Libby's Sliced Peaches pureed, and 2 cups soft custard. Cool. Fold into one cup whipped cream. (Serves 10)



Libby's 100 Foods

These Libby Foods are packed in special sizes for institutions:

Hawaiian Pineapple	Pork and Beans
California Asparagus	Olives
California Fruits	Pickles
Spinach	Mustard
Kraut	Bouillon Cubes
Jams	Beef Extract
Jellies	Chili Sauce
Santa Clara Prunes in Syrup	Catchup
Blackberries	Salmon
Loganberries	Evaporated Milk
Red Raspberries	Mince Meat
Tomato Purée	Boneless Chicken

DIETETICS AND INSTITUTIONAL FOOD SERVICE

Conducted by LULU G. GRAVES, 7 East 54th Street, New York
and MARY A. FOLEY, Director of Dietetics, Kahler Hospital, Rochester, Minn.

THE TREATMENT OF EPILEPSY WITH THE KETOGENIC DIET*

By Eliot H. Luther, M.D.,
Boston

IT HAS been known for some time that during starvation and acute febrile illness epileptics had fewer attacks than at other times, so much so that periods of starvation have been employed as treatment.

During starvation an acetone body acidosis develops and the blood sugar is lowered.[1] The ketogenic diet as developed by Wilder[2], and Peterman[3], and used in this clinic, is a method of producing these same chemical changes and maintaining them over a long period of time without harm to the patient.[4] This is done by keeping the carbohydrate and protein of the diet so low that not sufficient glucose is available for complete oxidation of the fat. In this way a high grade of acetone body acidosis can be obtained. It has also been found that the blood sugar is lowered.

In the calculation of such a diet the following factors must be considered:

1. The relation of the fat to the carbohydrate and protein in the diet.
2. The total caloric content.
3. The protein content.

The relation of the number of grams of fat to the number of grams of carbohydrate and protein present may conveniently be expressed as a ratio: Fat: carbohydrate + protein. That is if a diet contains 100 grams of fat, 50 grams of protein and 50 grams of carbohydrate, then F: c + p:: 1 : 1 where F= gms. of fat, c = gms. of carbohydrate and P= gms. of protein. Likewise if a diet contains 200 gms. of fat, 25 gms. of carbohydrate and 75 gms. of protein, then F: c + p :: 2 : 1. The first is spoken of as a one to one ratio diet and the second as a two to one ratio diet. The latter is more ketogenic than the former.

The total caloric content of the diet depends on the age, weight and activity of the individual patient. In general, the food requirement of a child is met by giving 50 per cent more than his basal caloric needs, the latter being estimated according to his expected weight for his height.[5] Thirty-five calories per kilogram of body weight will satisfy most adults.

The protein content of the diet is likewise in the case of children based on the theoretical weight for height. It is not safe to go below one gram of protein per kilogram of expected body weight in children, or below two-thirds of a gram in adults. These low figures can be reached only in the presence of sufficient calories.

To figure a 1:1 ratio diet, let F= number of gms. of fat, C= number of gms. of carbohydrate and P= number of gms. of protein.

1. Let X= C+ P
2. Then F:X:: 1:1
3. : . F=X

If the child weighs 26 kilograms the basal requirement is about 1,000 calories. Adding 50 per cent gives 1,500 calories.

Each gram of fat yields 9 calories.

Each gram of protein and carbohydrate yields 4 calories.

4. Therefore, 9 F + 4 x = 1500
5. Substituting from equation No. 3, 9 x + 4 x = 1500
6. 13x = 1500
7. X = 115.3 gms.
8. Substituting this value for X in equation No. 3, F= 115.3 gms.

If the child weighs 26 kilograms, then P = 26 if a gram of protein per kilogram is to be allowed.

9. Substituting these values in equation No. 1
   C = 115.3 — 26 = 89.3 gms.
   The completed diet is:
   F = 115.3 gms., P = 26 gms., C = 89.3 gms.

When used in accordance with the above instructions it can be shown that the ratios very closely approximate the ketogenic-antiketogenic ratio obtained by Woodyatt's method.[4]

Change Diet Gradually

The change from an ordinary diet to one of this character is best made gradually. The patient is, therefore, started on a 1:1 ratio diet, and changed to a 1½:1 ratio diet and so on up to a 4:1 ratio diet and in rare cases up to a 5:1 diet.

The changes are made once a week and the urine is tested at each visit for acetone and diacetic acid. The patients are also instructed in the details of the test and asked to test their urine at home. The degree of acetone body acidosis which can be obtained with no untoward symptoms is surprising.

The difficulties encountered are: first, breaking of the diet due either to failure to realize of what great impor-

*From Children's Medical Department of Massachusetts General Hospital, Boston.



Reading Hospital, West Reading, Penna., equipped for emergency lighting with Exide Batteries

Insure your hospital *against* LIGHT FAILURES

There is an Exide-equipped emergency lighting system to fit both your lighting needs and your available budget

LIGHTING current interruptions are inevitable. Although infrequent, they cannot be entirely avoided, and while darkness reigns, the hospital organization is paralyzed.

Any such interruption is serious—*unless the hospital is equipped with a dependable emergency lighting system.*

Such a system consists of an Exide Emergency Lighting Battery, together with charging apparatus by which the battery is at all times maintained in a fully charged condition, ready to function instantly upon failure of the main current supply.

In event of such failure the battery instantly and automatically supplies current to all lighting circuits connected to it. These may be some or all of the regular circuits, or special circuits installed for emergency purposes only.

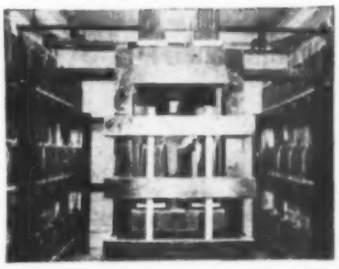
The insurance against light failure provided by an emergency lighting system is not expensive. Partial or complete protection can be obtained within your available budget.

Such a system needs little operating care and attention. Once installed, it will always be ready for emergencies.

Free survey and estimate

As a hospital superintendent, you know the value of emergency lighting, but you naturally want full information before committing yourself on any system.

To help you judge your requirements, we will gladly send an engineer to make a survey and an estimate of cost. Just mail the coupon.



Emergency lighting battery room. Battery consists of two sets of 57 cell type E-9 Exide



Charging panel and motor generator set

Exide BATTERIES

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia

Exide Batteries of Canada, Limited, Toronto

The Electric Storage Battery Company,
Allegheny Ave. & 19th St., Philadelphia, Penna.

Gentlemen: I am interested in emergency lighting for my hospital and would like to consult with an Exide engineer. I understand that his visit will not obligate me in any way.

Name .....

Hospital .....

City .....

State .....

tance small deviations from the diet are, or lack of cooperation; second, failure to take all the diet; third, constipation; fourth, hunger; fifth, failure to gain in weight.

Acetone and diacetic acid should appear in the urine on a 2:1 ratio diet and should increase in amounts as the ratio increases. Negative tests in a patient previously showing positive ones can nearly always be traced to a break in the diet and good results have not been obtained in those patients who repeatedly break their diet.

Failure to take all the diet is occasionally met with where fats are distasteful to the patient. Cream, butter, bacon, olive oil, either plain or as Mayonnaise, and cod liver oil have to supply a large portion of the calories in the higher ratio diets and various combinations have to be tried to get the patient to take all the food.

Constipation is met by the use of as many of the five per cent vegetables as possible and then using washed bran wafers or agar-agar jelly. Occasionally catharsis is resorted to.

Hunger is frequently encountered even where sufficient calories are fed to cause the patient to gain satisfactorily. Under these circumstances it is due to the small bulk of the diet, and bran wafers, agar jelly and gelatin are used as fillers.

Failure to gain may be due either to insufficient calories or insufficient protein in the diet. Total nitrogen determinations on twenty-four-hour collections of urine usually give the answer, although it must be kept in mind that in the absence of a sufficiently high caloric intake the patient will metabolize his own tissues and be in negative nitrogen balance even on relatively large amounts of protein.

3:1 Diet*

		Carb.	20
		Prot.	40
		Fat.	180
Breakfast			
	Orange	40	grams
	Egg	50	grams
	Bacon	30	grams
	Butter	20	grams
	40 per cent cream	60	grams
	Bran cakes		
	Cocoa shells		
Dinner			
	Chop	30	grams
	String beans	120	grams
	Lettuce	30	grams
	Mayonnaise	10	grams
	40 per cent cream	60	grams
	Gelatin	1	gram
	Butter	30	grams
	Bran cakes		
Supper			
	Chicken	15	grams
	Egg	50	grams
	Asparagus	120	grams
	40 per cent cream	60	grams
	Butter	35	grams
	Agar jelly		
	Bran cakes		

In cases that respond to the diet the attacks decrease in number and may disappear entirely in six weeks to two months. This group constitutes about one-third of the patients treated at this clinic. The remaining two-thirds usually show a dimunition in severity of number of attacks. After a period of six months of freedom from attacks the patients are being gradually returned to a normal diet although it is too early as yet to reach definite conclusions as to the permanency of the relief.

*Type of 3:1 ratio diet used in clinic, prepared by Elizabeth Thompson, special diet assistant, Massachuetts General Hospital, Boston.

Bibliography

1. Shaw, Edward B., Moriarty, Margaret E.: "Hypoglycemia and Acidosis in Fasting Children with Idiopathic Epilepsy." Am. J. Dis. Ch., 28, page 553-567 Nov. 1924.
2. Wilder, R. N. "The Effects of Ketonuria on the Course of Epilepsy." Mayo Clinic Bulletin 2, page 307, 1921.
3. Peterman, M. J. "The Ketogenic Diet in Treatment of Epilepsy." Am. J. Dis. Ch. 28, page 28, July 1924.
4. Talbot, Fritz B., Metcalf, Kenneth M., Moriarty, Margaret E., "A Clinical Study of Epileptic Children Treated by Ketogenic Diet." Boston Medical and Surgical Journal, Vol. 196, No. 3, pp. 89-96, Jan. 20, 1927.
5. Talbot, Fritz B.: "Basal Metabolism of Children." Physiological Review, 5 p. 477, October 1925.

ARE HOSPITALS EQUIPPED TO TRAIN DIETITIANS?*

If the requirement of six months' training in a hospital following the four years of undergraduate work is to be enforced for dietitians, some attention must be directed toward accrediting or otherwise evaluating the practice courses offered by the hospitals.

These now vary widely, both in scope of practice offered and in competence of instruction. The future of the profession will largely be determined by the character of these six months' training, for in this period ideals and attitudes toward her work will be developed by the student dietitian. If she is allowed to carry on the duties only of a cook, dishwasher, nurse, or calculating machine during this time, she will go into her own first job at least half reconciled to such an assignment.

Moreover, the hospital should offer definite teaching values to the student other than the opportunity for practice. Lectures shared perhaps with medical students, laboratory instruction in the use of clinical material, ward and clinic observation, are all parts of the dietitian's training which can be procured successfully only in the hospital, practically never in the university department of nutrition. If these opportunities are not open to the student dietitian she has little of educational value to gain from her six months' apprenticeship.

The conclusion is perhaps inevitable that only a few hospitals are equipped to give this training, and these few are likely to be teaching hospitals connected with medical schools or research institutions. Not more than five or six in California are needed at present, and about this number are equipped to offer satisfactory courses. In what manner the hospital training course is to be accredited remains to be worked out.

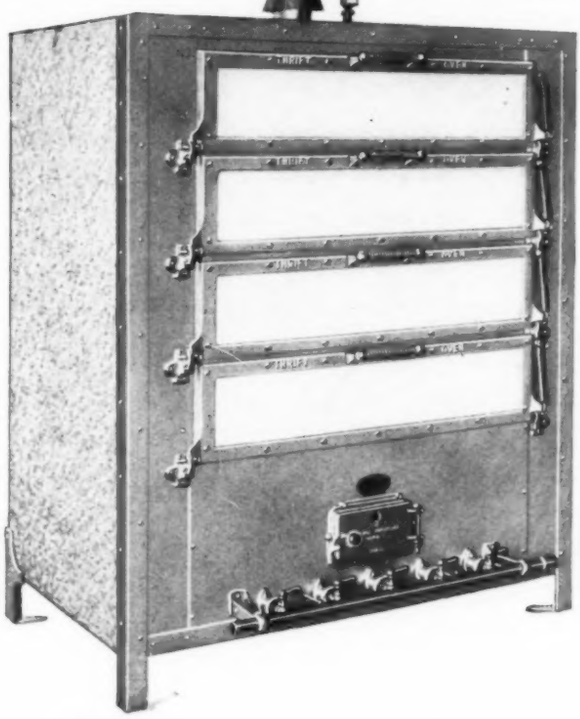
*Abstract from "The Registration of Dietitians" by Agnes Fay Morgan, Ph. D., published in the *Western Dietitian*, December, 1926.

DIET AND TRACHOMA DISCUSSED

The March meeting of the Minnesota Association of Hospital Dietitians was held in Millard Hall, University of Minnesota, Minneapolis, Minn. Following the business meeting two interesting talks regarding diet in relation to trachoma, were given.

Jule Huseman, who has been assistant dietitian at Fifth Avenue Hospital, New York, was recently married to Albert Elsenheimer, New York.

Built for the Diet Kitchen



The THRIFT Oven

A GREAT variety of foods such as pan goods, meat dishes, pastries, custards, etc., can be baked in the Thrift Oven.

It is ideally suited to the needs of the diet kitchen, as to performance, cleanliness and neat appearance.

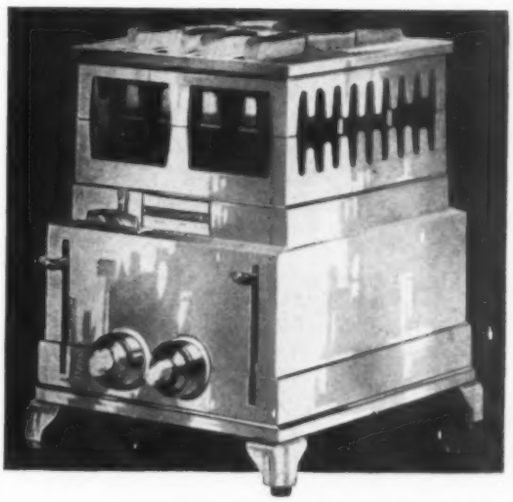
Every point of Thrift Oven construction lends itself to the complete utilization of heat; thus effecting material savings in fuel consumption.

6 *Reasons Why Thrift Ovens Bake Better at Lower Cost:*

1. ***Decks are light—easily removable,*** made of a smooth, stone-like, heat-retaining material.
2. ***Insulation*** is cut to fit, practically eliminating joints and insuring better fuel economy.
3. ***Doors*** close *without slamming*—stay closed without latching. Unique sealing feature prevents cold air from chilling other decks when any door is opened.
4. ***Combustion Chamber*** is insulated from lowest deck to prevent overheating. Designed to deflect heat efficiently throughout the oven.
5. ***The Siphon Flue***—a unique Thrift feature that brings about uniform distribution and more complete utilization of heat, and insures improved baking on each deck.
6. ***Burners*** heat oven rapidly, are easily adjusted and are provided with push button pilot lighting system.

Send for Bulletin MH 125 explaining the value of "baking at declining temperatures"

The Surface Combustion Co.
366 GERARD AVENUE, NEW YORK, N.Y.
Branch Offices in All Principal Cities



Now—Over 18,000 Toastmasters

are saving time—speeding service—making better toast

In thousands of hospitals, Toastmasters are now saving nurses' time, speeding service, and making the kind of toast that delights the patients. For this remarkable toaster is entire automatic in operation. It requires no watching. There is no turning of the bread. And yet every piece is done to perfection. This is how:—



1 Just Drop slices of bread into the oven slots.

The 3 small illustrations show how easily, surely and speedily this amazing toaster makes toast. No guesswork. No watching or turning. Both sides of the bread are toasted at the same time in an enclosed oven. Hence all the goodness and flavor are sealed in—and the toast is piping hot when served. And it only takes half the time to make toast this way as when each side is toasted singly.



2. Then press down the two levers. This automatically turns on the current and sets the timing device.

And here are 7 other reasons why so many hospitals have purchased a Toastmaster. 1. 18,000 Toastmasters have proved their worthiness over a 7 year period. 2. A Toastmaster occupies a space only 15x13¾ inches. 3. Turns out 480 perfect slices an hour. 4. Uses current only when toast is being made. 5. Requires no warming up. 6. Makes perfect toast automatically. 7. The speediest toaster on the market.



3 Pop! Up comes the toast automatically when it's done, and the current is automatically turned off.

If you are interested in knowing how a Toastmaster will save your nurses time, speed service—and make the kind of toast that patients like—drop a post card to the branch nearest you and we will send you a free booklet which describes the 4 different size models—and gives the candid opinions of hospitals which now have this toaster.

WATERS GENTER COMPANY
Dept. E-5
213 N. Second Street
MINNEAPOLIS, MINNESOTA

Pacific Coast Sales Office, C. N. Hildebrandt, 14 Montgomery Street, San Francisco, California

Chicago Sales Office Waters Genter Company 123 W. Madison St., Chicago, Ill.

Eastern Sales Office, Hector C. Adam, Inc., 156 E. 42nd Street, New York City

The TOASTMASTER

OUT-PATIENT SERVICE

Conducted by MICHAEL M. DAVIS, Ph.D., Executive Secretary, Committee on Dispensary Development, United Hospital Fund of New York, 151 Fifth Avenue, New York
A. K. HAYWOOD, M.D., Superintendent, Montreal General Hospital, Montreal, Que.

FROM THE OUTSIDE LOOKING IN*

By Louise Stevens Bryant, Ph.D., Committee on Dispensary Development,
New York

EVERY administrator of a hospital or clinic is accustomed to receive numerous patients sent by charitable agencies for examination and treatment. These agencies have a special purpose in thus referring their clients. Their experience, collected from a number of organizations in New York City, may be of interest to hospital administrators as giving a somewhat new angle towards their out-patient work.

When a social agency refers a client to a clinic for examination and treatment, it is generally with an ulterior purpose of determining the future social plan for the individual and his family. Can the man work? Can the woman be expected to keep up her home and care adequately for her children, or must she be relieved of part of her burden? Should the boy look forward to following his chosen career of mechanic, or will he need outdoor work with opportunity for setting his own pace, free from shop pressure?

Answers to these questions depend upon the doctor's diagnosis. Frequently also, the consummation of the plans will depend upon the conscious acceptance by the patient of the doctor's recommendation, followed by a regimen of treatment that may be extensive and inconvenient, if not actually painful. The social agency, therefore, looks to the clinic not only for immediate treatment of discovered conditions, but for a comprehensible diagnosis and plan of medical treatment to come, and also for such socialized dealing with the client that his fear of hospitals will be replaced by confidence, and his inertia by willingness to do his share in getting well and keeping so.

How Time Is Distributed

The extent and nature of the medical problems confronting family agencies make it obvious that a large proportion of the case worker's time must be devoted to securing examination and treatment for clients. From various studies that have been made of time distribution it appears that the time spent in all forms of communication with medical institutions is, of course, much greater, and accounts for nearly a fifth of the average case worker's day. The time spent actually within the walls of clinics by workers from outside agencies accounts for an average of twenty minutes in the day of every worker. In the course of this daily contact, the outside workers grow to know the medical institutions very well indeed, and through interviews and special reports made from time to time it has been possible to secure a pretty clear picture of the clinic as seen by the patient and his friends.

For some time complaints were expressed by the agencies to the effect that it was difficult to get satisfactory treatment except for emergencies, that service was unduly delayed, entailing long and costly waits, and most baffling of all, reports on the patient's condition and prospects were inadequate. Another difficulty voiced was that there was no common policy with regard either to the handling of the client-patients or the financial relationship between the two agencies. These complaints were rather general, so in order to get some idea of the concrete issues involved, and especially of their extent, records were made of the actual experiences in various clinics of clients referred for treatment or further investigation, after general medical examinations conducted in special centers by the Committee on Dispensary Development.

Worker Given "Refer Slip"

The examination was recognized as only the beginning of the physician's responsibility, which is not fully met until he has indicated what should be done, and also suggested means for doing it. Another objective was to measure the resources of the city for the treatment of the clients of social agencies and to see exactly how the various clinics were operating in this connection.

For every case examined, therefore, the worker was given a "refer slip," containing the patient's name, address, the agency concerned, the difficulty needing treatment or further examination, and mentioning a particular clinic which had been chosen with reference to its suitability for the patient. A separate slip was made out for each refer; if one patient needed three or four kinds of treatment, a corresponding number of slips would be prepared. Space was provided for a statement to be made by the worker about the results of the refer, including not only the diagnosis and advice of the physician, but also the satisfaction or dissatisfaction of both patient and worker with the treatment received, and the reasons therefor. The worker was also asked to record the time spent in going to the clinic, in waiting at the clinic, and with the physician.

About nine hundred individuals altogether were examined at these centers, and three-quarters of them were referred to clinics, there being nearly one thousand separate refers made. Returns were received from the

*Portion of a study, "Better Doctoring—Less Dependency," by the author, to be published by the Committee on Dispensary Development of the United Hospital Fund of New York. Copies of this study may be obtained from the Associated Out-Patient Clinics Committee, 244 Madison Avenue, New York.



It's Sharp



15

New
No. 15

The 8th Pattern

EIGHT patterns of *Bard-Parker* blades fitting three styles of handles, save the hospital many times over the cost of investing in new scalpels whenever a different blade pattern is required.

The new No. 15 blade, as well as the Nos. 10, 11, and 12 blades, fit both the No. 3 and the No. 5 handle.

No. 3 and No. 4 handles—$1.00 each. No. 5 handles—$1.50 each. Blades—half dozen of a size per package—$1.50 per dozen. Quantity discounts: Orders of 1 to 5 gross assorted sizes of blades, unit delivery—10%. Orders of 5 gross or more assorted sizes of blades, unit delivery—15%. Send for illustrated circular.

Bard-Parker products sold direct to consumers through authorized Agents—located in principal cities of the United States and Canada.

BARD-PARKER COMPANY, INC.
150 Lafayette Street. New York. N.Y.

agencies in 60 per cent of the cases, either reporting the results of the examinations, or telling why the clients had not gone to the clinic as recommended.

Of all those who were referred, 37 per cent had not followed the recommendation. Analysis of the records of these "lost" cases showed that in the majority the treatment would either have been painful, such as dental or orthopedic, or disagreeable, such as skin or gynecological. It is never easy to persuade women to be treated for their peculiar ills. They accept suffering as their natural lot, and moreover are often justifiably skeptical of the results of treatment, so frequently fruitless. Thus one woman complained, "They always examine me and tell me to go home and douche, and that's all they ever do." In these cases, moreover, social workers must combat ignorance and folk customs as well as disregard of self. On the whole, it was perhaps a high measure of success that 51 per cent of the women needing this form of treatment were willing to try to secure it. There was a larger proportion of successful refers in conditions where the results of treatment were understood, as among eye cases, or where the condition was alarming, as tubercular or cardiac; or unusual, as endocrine.

For those who did attend the clinics, 387 reports were made in sufficient detail to analyze the results. Questions arose as to whether the experiences of these clinics were typical of the ordinary "client patient" referred directly by the agency, because the workers in charge were especially interested, and contacts with the clinics were sometimes made by the physicians at the examining centers. By way of control, three family welfare agencies reported on 288 additional cases. This made possible an analysis of the experiences of 675 client-patients in attendance at clinics in about seventy out-patient departments and unattached dispensaries.

Contrary to expectation, the great majority of patients and the workers in charge were entirely satisfied with their clinic visits. Only 102, or 15 per cent, complained about the treatment they received at the hands of doctors, nurses or other clinic workers. Another 15 per cent, who were generally satisfied, complained about the time. Aside from the fact that more complaints were made by the second group, the details of the reports from the two sets were quite similar, so that they may be considered together.

Comments Are of Three Sorts

The reasons given for satisfaction or complaint were for the most part highly intelligent and discriminating, and should be helpful to clinic managers. There were no less than 700 detailed statements made, of which 526 (75 per cent) related to pleasant reactions. The comments were of three sorts: the first reflect the personal handling of patients, the second, the general administration of the clinics, and the third, the joint interest of clinic and agency in the client-patient. To begin with the sources of satisfaction, the following remarks were made with regard to the treatment of the patients as individuals:

Cordial or courteous treatment; consideration of patient's feelings; personal attention to individual needs, economic or linguistic; patient felt at home, or felt confidence in care.

Typical comments on administration were:

Examination was thorough; the arrangements for follow-up were adequate; reports and directions were definite; attention was prompt; appointments were made; waiting time was short; the clinic was well organized, and its atmosphere business-like; an intelligently interested nurse was present; there was direct, easy interdepartmental contact and patient was treated in same institution for other conditions; consultations were arranged for readily; records were adequate; the place was well aired. Such comments as these occurred 248 times.

The third set of comments bears directly on the contact between hospital and social agency as a joint enterprise, as:

Hospital authorities cooperated with social agency; they gave prompt and definite reports; social service department was interested; physicians were socially minded and interested in home conditions and family history of patient.

Then there were other statements about conditions, of dubious value from the point of view of sound clinic management, such as:

The clients accompanied by social workers were given precedence in lines; outside social workers had access to examining physicians or original records; and Wassermann tests were given as a "routine."

Nature of Complaints

Complaints were either about the absence of the desirable conditions just enumerated, or the presence of some positively bad situation. Personal treatment was complained of in forty-three instances. This included rudeness of doctors, nurses or registrars, in some cases rather glaring. Perhaps the most serious example of this was where the doctor or nurse questioned the patient about intimate details before other patients. Other complaints were, impatience, indifference to whether the patient understood the condition or directions, no confidence inspired by physician, patient frightened or made nervous, lack of privacy in interviews or examinations, payment insisted upon though patient was unprepared.

Another serious complaint was that in a clinic where some patients were admitted free or for a nominal fee, and others paid a fee approximating cost, a distinction was made in favor of the latter, who were treated with polite respect, while the former were handled roughly and made to wait outdoors or in crowded rooms for long periods. In several cases, the patients expressed general aversion, saying, "Dispensaries are all alike."

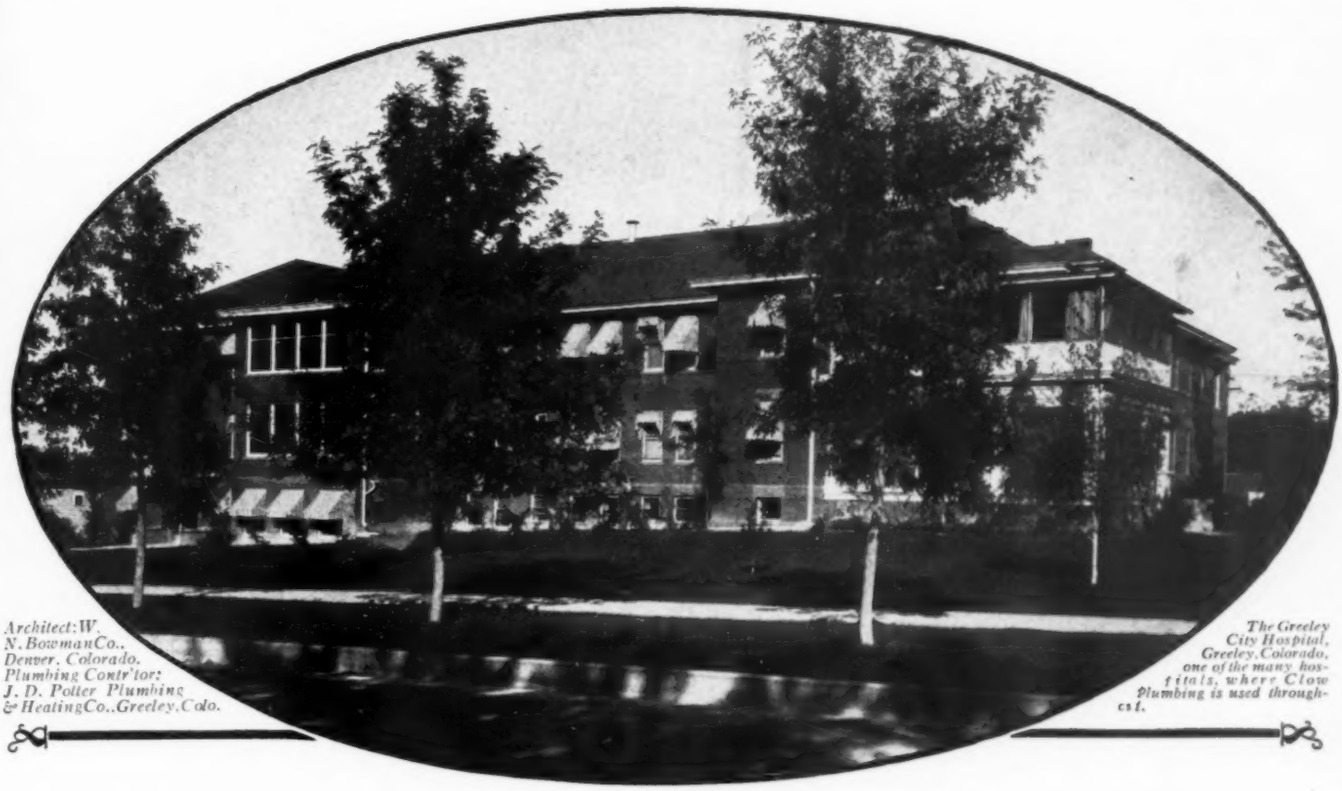
Among the complaints 117 were directed against the general clinic management or the medical services as such. Of these the most frequent were that the examination was not thorough, that follow-up was lacking, or directions were vague, conflicting or duplicated, as in one case where eye drops were administered twice by mistake. It was also charged that doctors came late, worked hurriedly, and were insufficient in number. For example, they sometimes arrived so late that patients, after coming a long distance and waiting a long time, were not seen at all, and no other appointment was arranged.

The physical conditions in several instances were complained of as crowded, noisy, confused, badly ventilated, unclean, unsanitary, inconvenient.

Again, it was complained that there was lack of coordination between the departments; patients referred for special examination and reports would be overlooked, and the original work delayed. Or, patients were seen by a different doctor each time and no arrangements were made for forwarding the history to the new man.

Among complaints directed particularly against the medical agency's attitude toward the social agency were the following:

No definite or usable report was given to the social agency in spite of repeated requests, with explanations as



Architect: W. N. Bowman Co., Denver, Colorado. Plumbing Contr'tor: J. D. Potter Plumbing & Heating Co., Greeley, Colo.

The Greeley City Hospital, Greeley, Colorado, one of the many hospitals, where Clow Plumbing is used throughout.

Hospital Plumbing that the Board Can Forget

Demands are heavy, on hospital plumbing. Twenty-four hours a day — day after day, year after year, put it to an unusually severe test.

Only equipment of the best construction can stand this hard service. Clow plumbing has been built especially for hospital work – built by a company whose 49 years of experience befits them to compete in this specialized field.

In addition, Clow builds a complete line of fixtures for use in hydro-therapeutic treatments. As a matter of fact, many such fixtures were first designed and executed by Clow.



Because of these things, an ever increasing number of hospitals throughout the country are choosing Clow plumbing, until today Clow leads in this difficult specialized field.

The Greeley City Hospital is a typical Clow plumbing installation.

JAMES B. CLOW & SONS, 201-299 North Talman Ave., CHICAGO

Sales Offices in principal cities

CLOW

PREFERRED FOR EXACTING PLUMBING SINCE 1878

to why it was wanted. In more than half of the cases where there was a complaint, no report by the physician was given, although statements by the doctor on his findings and the future medical plans were given in nearly all the satisfactory cases. The exceptions to this were mostly dental cases where no special report was needed. This is probably the greatest difficulty that the agency meets in attempting to secure medical service for its clients.

A related complaint was about the difficulty of securing direct information regarding the client's medical condition. In several instances the hospital authorities, including the doctor, social worker, and nurses, did not seem interested in the medical-social problems presented. In one instance it was complained that the outside social worker accompanying a patient was not given precedence; in two, that she was not allowed access to the examining room or to the physician; in one case, that Wassermanns were not made as a routine measure.

There were a few instances where the social agency complained that it was unable to arrange for payments for the specific examinations or treatment required because the medical institution apparently had no rule regarding this and charged for tests sometimes at one rate, sometimes at another, and occasionally not at all.

Dental Clinic Reports Favorable

There was a marked difference in the reactions expressed in relation to various sorts of clinics. In Table I are given the figures on the basis of 100 cases visiting each of eight types of clinic. The clinic with the most favorable reports was dental, where 89 per cent were satisfied, and here no one complained about time, probably because most dental work is done by appointment. In neurological and mental clinics there were complaints in 58 per cent, either about time or other conditions. This is doubtless due largely to the nature of the cases. The neurotic person is not easily satisfied with any sort of social contact, and is more inclined to irritation and wounded sensibilities than the normal person.

However, there is reason to believe that conditions are quite unsatisfactory in a number of nerve clinics, not only as regards physical equipment but also in the personal treatment afforded. The chief complaints against neurological clinics had reference to one institution, where patients are required to arrive an hour and a half before the clinic "opens." As there is no appointment system, new patients frequently arrive three hours ahead. The waiting room is so small that patients regularly wait in queues outside in all weathers, and those inside complain of poor ventilation or cold drafts. Patients are shifted from one doctor to another without warning, and in one case the social worker, not being told of the change in reference, accompanied the patient several times to the first physician, who also was unaware that the patient was visiting a second clinic on other days. The resulting confusion in the patient's mind may be imagined. In another case, a little girl visited the clinic three afternoons before being examined at all. This entailed twelve hours of waiting, after which an examination was made which took twenty-five minutes. Another young girl, who was considered not mentally sound by her family and friends, was examined, and after the family and personal history was obtained with the child listening, the doctor turned to her and said, "Your mother thinks you're crazy; are you?" In another instance the doctor asked the social worker in the patient's presence, "Why did you bring her to me?"

In the general medical clinics, to which the larger number of cases were referred, syphilis and skin were included as well as the usual sub-departments, such as pediatrics, cardiac, and tuberculosis. Relatively few complaints were made about cardiac and tuberculosis service, while the personal treatment was objected to in those for syphilis and skin diseases.

Without question, the single point most complained about was the time involved. This occurred some forty times in connection with other complaints, and in 101 cases it was the only complaint. This makes a total of 141 cases

TABLE I

EXPERIENCES REPORTED BY 675 CLIENT-PATIENTS IN VARIOUS TYPES OF CLINIC

Type of Clinic	Total Cases	Per 100 Cases Reporting Satisfaction	Complaint About Time	Complaint About Other
Total	675	70	15	15
General Medical	243	65	18	17
Dental	101	89	0	11
Eye	81	64	19	17
Gynecological and Obstetrical	68	79	10	11
Nose and Throat	67	46	34	20
Surgery and Orthopedics	54	74	12	14
Neurological	41	42	37	21
Ear	20	80	15	5

TABLE II

AVERAGE TIME REPORTED BY CLIENTS ATTENDING CLINICS

Average time	Cases Reporting All Cases	Satisfied	Complaint Time Only	Otherwise
Away from home	2 hr. 32 m.	2 hr. 14 m.	3 hr. 35 m.	2 hr. 24 m.
In Transit	54 m.	51 m.	1 hr. 17 m.	43 m.
In Clinic	1 hr. 38 m.	1 hr. 23 m.	2 hr. 18 m.	2 hr. 2 m.
Waiting	1 hr. 9 m.	53 m.	1 hr. 50 m.	1 hr. 35 m.
With phys.	29 m.	30 m.	28 m.	27 m.
Proportion of clinic time with phys.	30%	37%	20%	22%

of complaint about the time consumed, among 675 cases, or in over one-fifth of the number reporting. As this was so important a feature, affecting the medical institutions as well as all the patients and referring agencies, a special study was made of this factor, with results as follows:

Three items were recorded—the whole time away from home, the time spent waiting, and the time with the doctor. The average periods reported in 479 cases are shown in Table II, which gives first the total average for all cases and then the average for each group according to their general reaction, whether satisfied with the experience, or complaining about time, or otherwise.

Proportion of Time With Physician

The significant time element in determining the character of the experience seems to be the proportion of clinic time spent with the physician. On an average 30 per cent of the clinic time was thus spent. Among the satisfied group, however, this proportion was 37 per cent. It is natural, of course, that even a long wait would seem justified if the time with the doctor was proportionately long. The time spent with the doctor averaged altogether twenty-nine minutes, and in the case of those satisfied, was thirty minutes—or a trifle more than for the others. Among the satisfied group, 45 per cent had more than a half-hour with the physician, and 13 per cent had over an hour. While among those complaining about the time, only thirty-two had more than half an hour, and among those complaining about other matters, 27 per cent had over a half hour.

Table II shows that it required more than half a working afternoon or morning to visit a clinic, and that the time spent in the clinic averaged over an hour and a half,

IT'S IN THE CATALOG

ALWAYS you'll find it *in the catalog*, in the catalog of the American Hospital Supply Corporation. Think of rubber goods, syringes, needles and pins, thermometers, aprons, surgeon's knives, *whatnot*—you'll find them *in the American catalog*. To the hurried, busy, harried superintendent, there's a bit of contentment stowed away in that phrase: *it's in the catalog*. When you need supplies that *must* be dependable, supplies that *must* give good service, you know where to turn. Thumb its pages and find the dependable, long wearing, satisfying wares you seek. *All*, at a price that you will call fair and square, at a price that you'll willingly pay.

The
AMERICAN HOSPITAL SUPPLY CORPORATION
15 N. JEFFERSON STREET • • CHICAGO

HOSPITAL SUPPLIES

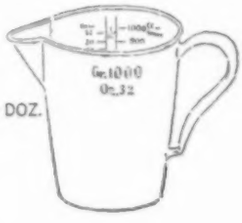


SWEDISH FUNNEL $4.80 A DOZEN



GUARANTEED CLINICALS
$78.00 A GROSS $7.00 A DOZ.

W/E AUSTRIAN
GRADUATE $16.80 A DOZ.



For complete index of advertisements refer to the Classified Directory

of which over an hour was spent waiting, and a scant half hour with the physician. Individual cases varied considerably from this, the longest time being twelve hours, a working day and a half, and the shortest a half hour. Even among those making no complaint there were great variations, one being as long as seven hours away from home. In the extreme case which took twelve hours, over six were spent waiting, as the patient was kept to see two other physicians. Among those making any complaint, the shortest time away from home was an hour. Several instances were reported of waits of three and four hours.

Among the satisfied group, the average time away from home was two hours and a quarter, of which one hour and twenty-three minutes was in the clinic, and thirty minutes with the doctor. Even these patients waited fifty-three minutes on the average.

Those complaining about time spent three hours and thirty-five minutes away, with two hours and eighteen minutes in the clinic, of which only twenty-eight minutes was with the doctor, and one hour and fifty minutes was consumed in waiting. It is to be noted that those individuals also spent one hour and seventeen minutes in transit, a far longer time than the average, so that fatigue

TABLE III

TIME IN CLINIC, WAITING AND WITH DOCTOR, COMPARED WITH GENERAL REACTION TO THE EXPERIENCE

Reported Among Each 100 Patients

Time	Total	Satisfied	Cause of Complaint: Time	Cause of Complaint: Other
A. In Building				
Under an Hour	27	46	0	35
From One to Two Hours	33	34	35	50
Over Two Hours	30	20	65	70
B. Waiting				
Under an Hour	52	65	5	42
From One to Two Hours	29	24	54	27
Over Two Hours	19	11	41	21
C. With Doctor				
Under Half an Hour	62	58	68	73
One Half to One Hour	29	32	26	17
Over One Hour	9	13	6	10
D. Per Cent of Time With Doctor				
Less than 25%	38	25	66	25
From 25 to 49%	34	39	25	20
Over 50%	28	36	9	15

TABLE IV

TIME WITH DOCTOR IN CLINICS OF VARIOUS TYPES

Minutes Spent with Doctor Per 100 Patients in Each Group

Type of Clinic	Total Average	Under 15	15-29	30-44	45-49	60 and Over
Total	31	30	32	19	10	9
Neurological	51	14	29	21	4	32
Gynecological	35	10	45	21	17	7
General Medical	33	21	36	20	12	11
Eye	25	36	29	25	6	4
Dental	25	63	4	18	7	8
Surgical	23	30	44	15	7	4
Nose and Throat	17	70	15	10	5	0
Ear	10	55	18	9	9	9

may have affected their judgment about the whole experience. In the case of those making other complaints, the time in transit was notably short, being forty-three minutes, and the waiting time one hour and thirty-five minutes, only fifteen minutes less than for those complaining about time.

So far, we have considered only the averages, which are not an adequate indication of the actual time experiences of any given individual. The ranges of time are more significant than the averages, and these are shown in Table III, according to the various amounts of time spent, A, in the clinic; B, waiting; and C and D, with the doctor.

Taking all the cases, it may be seen in Part A of Table III that about a quarter, 27 per cent, spent less than an hour in the clinic. A third spent between one and two hours, and 30 per cent spent over two hours, in some cases as long as seven hours. There was a direct relation between the length of time and the reaction reported, so that while only 20 per cent of those satisfied spent more than two hours, 65 per cent and 70 per cent of the others spent over two hours.

Time Spent With Doctor Varies

An even more definite relation of time to total reaction is shown in connection with waiting, as only 11 per cent of the satisfied spent over two hours waiting, as compared with 41 per cent of those complaining about time, and 21 of the others (Part B). As to the time with the doctor (Part C), 58 per cent were with him less than half an hour, while 68 per cent of the ones complaining about time were with him less than half an hour, and 73 per cent of the others. The proportion of the total clinic time spent with the doctor is shown in Part D. Two-thirds of those complaining about time were with him less than 25 per cent of their stay in the clinic, as compared with a quarter of the two other groups. Among the satisfied ones, on the other hand, 36 per cent were with him over half their time, as compared with only 9 per cent of those complaining about time and 15 per cent of the others.

The time with the doctor naturally varied according to the type of case and the character of treatment required, which would be indicated by the clinic attended. The time spent with the doctor in each type of clinic is shown in Table IV, which represents 400 cases attending institutions with comparable organizations, such as large hospital out-patient departments and clinics like Cornell, New York and Vanderbilt. The average number of minutes spent with the doctor in each sort of clinic is shown in the first column, and in the other columns the percentages reporting attendance for each fifteen-minute period, beginning with less than fifteen minutes, and extending to sixty minutes and more.

The longest time was in the neurological clinic, where the average was fifty-one minutes, and 57 per cent of the patients were over half an hour, and 32 over an hour with the doctor. Next came the gynecological clinic with an average of thirty-five minutes, and with 45 per cent over half an hour, and 7 over an hour. General medical showed an average of thirty-three minutes, with 43 per cent over half an hour and 11 per cent over an hour. The rest of the clinics averaged less than half an hour, the shortest being ten minutes for the ear clinic, which had 73 per cent under half an hour.

SPONSORING CLOSER RELATIONSHIPS BETWEEN DISPENSARIES

The new hospital committee plan of the Academy of Medicine of Cleveland, aims at closer relationship between practicing physicians and the hospitals. Under the present arrangement each hospital staff or superintendent appoints a committee of three from the medical staff to discuss with the superintendent, nurses and social service workers of the hospital concerning individual or general problems affecting dispensary admissions and activities.

The academy has selected one member from each of the hospital committees to sit on an inter-hospital committee which is constituted as a sub-committee of the academy. This committee will be a correlating agency in problems affecting more than one dispensary.

Reduce Kitchen Costs

with the GIANT 15 Qt. Mixer



Here is a compact, rugged, simple little mixer, built by the same experienced engineers that are responsible for the famous Giant Mixers. The 15 quart Giant fits into any little space, 13 by 15 inches. Three speeds—all controlled by one lever, no jar or shock or possibility of injury to gears or mechanism.

It changes from one job to another in a twinkle. The bowl simply goes on or off—no raising or lowering—no clamps, no screws to bother with or waste time.

You put on beaters with one quick motion that automatically locks them in position for operating. Nothing could be simpler and quicker. Simply draw the lever in position and the mixer does the rest. When done with your job, lift the beater out of the bowl with one easy motion, and the contents of the bowl are freely at your disposal. Bowl can be lifted off or swung to either side. Wash the smooth, seamless bowl and it is ready for the next job.

Send for descriptive bulletin giving full details.

The Century Machine Co.

4426 Marburg Ave. Oaklet, Cincinnati, Ohio



This type of food truck is being used with excellent results in the Wilkes Barre City Hospital.
Elmer E. Matthews, Supt.

DUPARQUET

HOSPITAL PANTRY ELECTRIC TRUCK

Table made of heavy tinned copper with polished Nickel Top.

Closet constructed of galvanized metal with reinforced bands.

Sliding Doors.

4 Nickel Jars suitable for soups or vegetables.

1 Polished Nickel Meat Dish with Rolling Cover.

Table and Closet both heated electrically.

Maximum Current Consumption, 3000 watts.

We manufacture a complete line of French Ranges, Kitchen Equipment and Utensils and are in a position to give your requirements prompt attention.

DUPARQUET, HUOT & MONEUSE CO.

108-114 West 22nd St., New York

BOSTON, MASS. 90 North St.
CHICAGO, ILL. 312 W. Ontario St.
DETROIT, MICH. 530 Buhl Bldg.

For complete index of advertisements refer to the Classified Directory

HOSPITAL EQUIPMENT AND OPERATION

With Special Reference to Laundry, Kitchen and Housekeeping Problems

Conducted by C. W. MUNGER, M.D., Director, Grasslands Hospital, Valhalla, N. Y.

WHY SMOKE STACKS SHOULD BE INSPECTED ANNUALLY

By Russell Byron Williams,
Chicago

WITH the advent of summer and low heating and power requirements, many superintendents will take the opportunity to overhaul the boiler plant equipment. Where there are two or more boilers, the load for the entire hospital will be concentrated on one, while the remaining boiler will be taken off the line and given thorough cleaning, inspection and repair. Such an annual practice makes for long equipment life, higher boiler efficiency and lower fuel bills.

In this periodic maintenance work the smoke stack should not be overlooked, for it can have as marked an effect on boiler efficiency and fuel costs as any other single item of equipment.

There are two reasons why the smoke stack should be subjected to an annual inspection and overhauling. The first, and perhaps the more important, is that a leaky stack will seriously impair the quality and quantity of steam generated, thereby needlessly enlarging fuel costs. The second reason is that a stack in poor repair is in constant danger of coming down and therefore constitutes a menace to property and life.

Inspection methods for smoke stacks will, of course, vary with local conditions. With a permanently installed ladder on the exterior of the stack it is a simple matter to install a sling at the top so that a man can let himself down gradually, inspecting every portion of the exterior as he goes. In some cases high powered binoculars or a telescope may be employed to locate areas on the exterior surface that require attention.

How to Remedy Corrosion

With steel stacks the most obvious thing to look for is the attack of corrosion. When found, this can usually be remedied by the application of acids and paint. Rivets and seams should be tested for tightness and strength; wind braces and guys "taken up" when needed; while the foundation should be thoroughly examined for cracks, settling or signs of disintegration. Breechings, regardless of building material, should be tight at all times since a leak or fissure in this part of the draft system will prove costly to the efficient operation of the boilers.

In painting stacks certain basic principles must be obeyed if the job is to prove satisfactory. No steel stack should be painted when wet with rain, and painting jobs started in damp or freezing weather rarely give satisfaction. Furthermore, the temperature of the stack should not be above 300° F. at the time the painting is done. Ordinarily, painting can be satisfactorily completed and gives the greatest assurance of good results when the stack temperature is about 200° F. To apply paint over a rusty surface, loose paint or dirt, is never satisfactory. On stacks, as everywhere else, paint should be applied only to a clean surface. On smoke stacks the surface can be cleaned either by steel scrapers or by vigorous brushing with wire brushes, the cleaning being done as the painting progresses. When galvanized surfaces are to be covered it is better either to allow the surface to weather about eight or nine months, or to etch the surface with a 20 per cent acetic acid solution, before the paint is applied. If this is done, and an oil paint mixed with 15 per cent naphtha applied, the covering will prove most satisfactory.

Paint Should Be Applied Evenly

For smoke stacks it is essential that the paint be evenly applied and well rubbed during application, to exclude all air from beneath its surface. Air pockets, if allowed to remain under the paint, will cause blistering and loosening. The widely fluctuating temperature of smoke stack surfaces accentuates this characteristic. In rubbing out the paint a good stiff round brush will be found effective.

Stack paints should never be thinned with gasoline or benzin. Only in extreme cases should a small percentage of turpentine be used for this purpose. Prepared paints, designed for high heat resistance, are usually mixed with a special oil, for which reason it is necessary in ordering paint to state the maximum temperature to which the surface is to be heated. In consideration of this special mix it is seldom wise to leave the selection of the type of paint, or its mixing, to a local painter. Prepared paints, made by a reliable firm, and bought only after complete specifications have been given, should be used. Coal tar paints may be used successfully if the surface temperature does not exceed 450° F. Such paints, however, must be thoroughly cleaned off before a second application is made. Because it will withstand high temperature and is comparatively easy to apply, graphite paint is probably the most satisfactory for smoke stacks.

Brick stacks, if properly constructed, require little at-

PEQUOT
REG. IN U.S.PAT.OFF.
SHEETS AND PILLOW CASES

for whiteness

OPEN THE PEQUOT PACKAGE. SEE how *white* Pequot sheets are! So lustrous, so snowy clean, there is real pleasure in looking at them.

Pequot sheets are bleached in swirling torrents of pure artesian well water. No injurious chemicals weaken the fabric. With proper laundering they will stay white *permanently*.

Every other Pequot manufacturing process has the same skilful care —from the selection of the long, strong cotton fibre to the final inspection of the finished sheets. Strength, long life, smoothness, —these are built in every thread, woven in every inch, of a Pequot.

The larger your institution, the more you require Pequot economy. Careful buyers usually end by *standardizing* on Pequot.

Made by the Naumkeag Steam Cotton Company, Salem, Mass., Parker, Wilder & Co., New York and Boston, Selling Agents.



For complete index of advertisements refer to the Classified Directory

Cleanliness— Comfort— Fuel Economy

DEMAND

CHAMBERLIN



The Babies' Hospital, Cleveland, Ohio. Equipped throughout with Chamberlin Weather Strips. Abram Garfield, Architect. Johan Gill & Sons, Gen. Contrs.

EACH advantage in itself—cleanliness—comfort—fuel economy—would make it highly advisable to include Chamberlin equipment in all hospitals—old or new. It is essential that dust movements be minimized and cold draughts eliminated to insure healthful, uniform temperatures. This fact is being increasingly recognized and the Babies' Hospital of Cleveland furnishes a typical case in point. Here 607 windows, doors, and transoms are Chamberlin equipped. Chamberlin equipment gives lasting satisfaction because the Chamberlin design is correct—because trained Chamberlin mechanics make all installations—and because Chamberlin guarantees and services its equipment "for the life of the building."

Write for Chamberlin Literature

CHAMBERLIN WEATHER STRIPS

"SINCE 1893-THE STANDARD"

CHAMBERLIN METAL WEATHER STRIP COMPANY

West Lafayette Blvd., Detroit, Michigan

Over 100 Sales and Service Branches throughout the United States

FC-180

tention. However, even these should be tested periodically to make certain that the draft produced is at the required value. If the examination shows the draft to be low, the entire stack should be examined for leakage, and the defective spots, when found, pointed with a good grade of mortar.

Just as in the interior of a fire box, the brickwork on the interior of a steel or masonry stack is subjected to disintegration and erosion. In stacks, however, such erosion and disintegration is much slower, because of the lower temperatures. In fire boxes the refractories often melt, whereas in stacks the trouble is largely found in mortar shrinkage or in the uneven expansion of bricks. To keep such stack linings absolutely tight and to eliminate the possibility of serious damage, stack brick-work interiors should be examined whenever conditions make this possible. Where pointing with mortar, or the replacement of a defective brick will not correct a defective area, the entire damaged portion should be torn out and replaced with new bricks and mortar, filling the joints with a plastic refractory. Such action will involve some expense, but it is invariably expense well justified. Any one of the number of plastic refractories that have proved themselves capable of furnace work may be used successfully in such repair work.

In unlined steel stacks, or in the upper portions of the stack which may not have a brick lining, there is always danger of corrosion because of the presence of sulphuric acid which has been formed by the condensation of the flue gases when coming in contact with the cool surfaces of the stack. Where such corrosion is found, the plates should immediately be cleaned, then treated with a heat resisting paint or other covering. In the event the corrosion has proceeded so far as to extend nearly through the steel plate, the damaged portion should be patched in much the same manner that boilers are patched.

In recent years a novel method has been perfected for the repair or rehabilitation of smoke stacks. This method is one that completely insulates the stack, on the exterior, with a coating of concrete. In repairing stacks in this manner it is necessary first to install vertical reinforcing rods around the outside of the old stack. These rods are tied together and held in place by means of woven wire mesh and horizontal tie-rods. The concrete, which is usually a mixture of No. 2 torpedo sand and Portland cement, is shot into place (over the installed reinforcing rods and mesh) by means of a cement gun operating with a pressure of from 45 to 60 pounds per square inch.

This method has several advantages: First, a solid shell of concrete is provided for the steel stack, which provision is the best possible treatment; and second, the operation can be completed without interruption to stack service, since a hot stack is in no way detrimental to the work. The method is simple, rapid, and requires none of the precautions attendant upon other methods of repair. It is of course more costly than other methods but the result is worth more.

In the employment of a concrete shell as a repair element it is sometimes profitable to place a layer of asbestos board between the steel stack and the layer of concrete (inserted at the time the reinforcing rods and mesh are installed). This board acts as a compression sheathing, so that contraction and expansion stresses, naturally concomitant with wide fluctuations in temperature, will be partially absorbed by the board and will not be communicated immediately to the concrete which naturally responds more slowly to temperature changes than steel.



No longer need every door be a destroyer of silence

IT IS NEEDLESS to lay stress upon the discomforts of unnecessary noise, or call to mind the amenities of unbroken quiet. All know well how distressing is the incessant banging of doors!

Manufacturers for years, in response to an ever-increasing demand, have been experimenting to contrive a resistance hinge that would control the swing of doors—operate in absolute silence—and yet, despite constant strain, be durable in mechanism.

This at last has been accomplished by the McKinney Manufacturing Company, which has contrived and perfected the friction-control hinge that leaves the door slam-proof.

A hospital door can now be left ajar at any desired degree, without danger of a sudden gust of wind blowing it to with a resounding thud. No longer can careless attendants and thoughtless visitors play havoc with patients' nerves. Nor can a door be deliberately slammed; for so constant and accurate is the resistance of the hinge, that it must be either pushed or pulled—though ever so gently—right up to the jamb.

To the eye it is hardly perceptible that this hinge is of unusual mechanism, the appearance being that of a beautifully finished ordinary butt-hinge. Yet it is so constructed that by means of a mechanical adjustment it can be freed of resistance or tightened to any desired degree without the dismantling of the door.

The cost of this hinge is so reasonable that many hospital units are already considering replacing their free hinges with McKinney Friction-Control.

Send for the complete literature about this remarkable hinge.

McKINNEY
friction control
HINGES

McKINNEY MANUFACTURING CO.
Pittsburgh, Pa.
Please send me complete hinge literature.
Name .....
Address .....
Name of Your Hardware Merchant .....
M.H. 5-27

For complete index of advertisements refer to the Classified Directory

2 Simple Operations

That herald a new standard in dry mop renovation and efficiency



1 Raise the door and insert the mop in the sealed, dustproof chamber.

The sanitary dust receiver is durably constructed with a minimum of parts. The wheels are rubber tired, noiseless and allow full freedom in progressing from room to room. The receiver has a large capacity, sealed to eliminate dust leakage. Here are savings in time and effort that will appeal to every hospital.

Simple—Effective—Trouble-Free—Cheap

2 Shake the mop up and down against the heavy rods over the receiving pan.



In the period of a few moments the mop is removed, relieved of dust and ready for further duty. Steps are saved, fewer mops are needed. There is no needless running back and forth. The entire problem of dry mop cleaning is here solved and placed on an economical and efficient basis.

OUR TEN DAY TRIAL OFFER

Send the coupon. We will immediately forward one Hospital Model No. 2 Sanitary Dust Receiver. Try it out for ten days. If it does not satisfy your expectations return it to us. Otherwise keep it to your good benefit and send us a check to cover its low cost of $25.00.

Mail the Coupon Today and Allow Us to Substantiate Our Claims

SANITARY DUST RECEIVER CO.,
9 W. Main St., Malone, N. Y.

Send one Sanitary Dust Receiver, Hospital Model 2. Within ten days we will either remit the price of $25.00 or return it.

Hospital .....

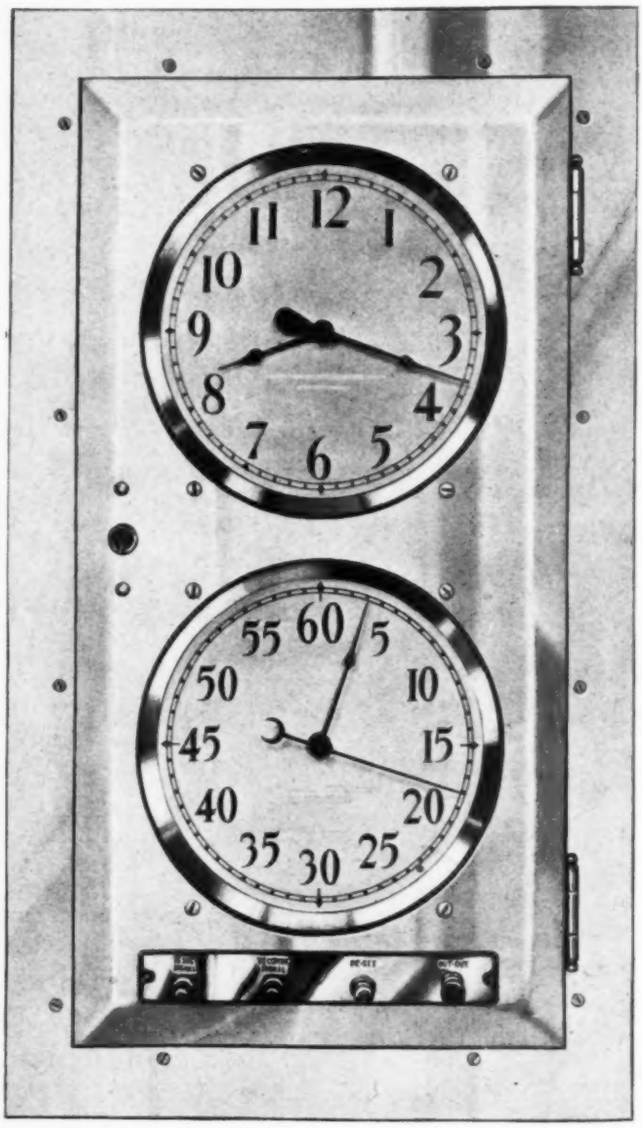
Address .....

Superintendent .....

AUTOMATIC CLOCK SYSTEM FOR OPERATING ROOMS

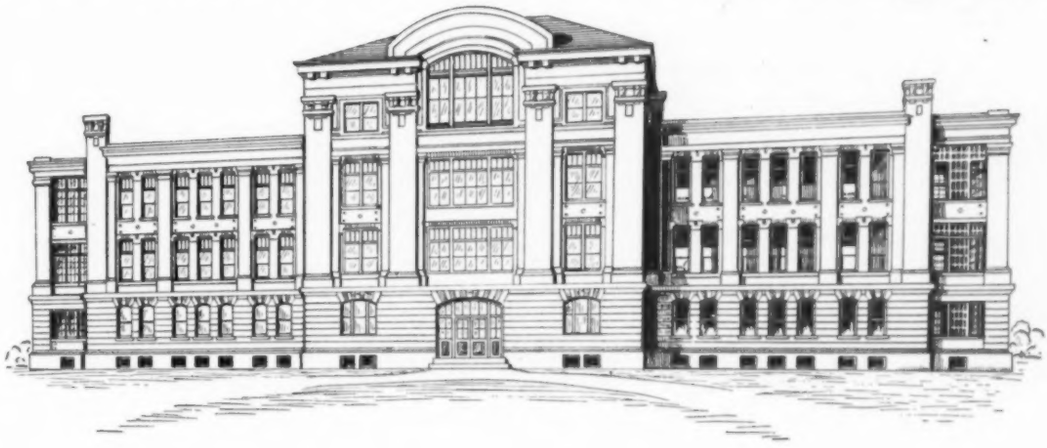
An automatic clock has been invented to afford to anesthetists, surgeons, physicians and attendants easily observed and distinctly indicated time that will direct them in taking advantage of conditions pertinent to the care of patients. For instance, in administering an anesthetic, the hands of the seconds beat dial are started when the anesthetic is applied. The movement of the hands then affords opportunity for those in charge of the case to observe closely the pulse, respiration and general condition of the patient, in relation to time; to follow closely the reaction of the anesthetic upon the patient; and to take advantage of the conditions, when favorable, to carry on the surgical work for which the anesthetic was administered.

Each clock includes two eight-inch dials that serve two distinct purposes. The upper dial with hour and minute



hands operates as a standard secondary clock to indicate the time of day. The lower dial carries two hands that show seconds and minutes of elapsed time, the maximum indication being fifty-nine minutes and fifty-nine seconds. The hands of the lower dial can be started or stopped at the will of the operator, and with one movement of a

The Service of *Your* Hospital!



Just Imagine Yourself a "Customer" of Your Hospital

"Have you ever paced a hospital walk while someone near to you was suffering?"

"And you repeated over and over in your mind all the things that were being done—that could be done?"

And in the better moments later when you sat by the bed side with thanks in your heart and happiness in your eyes, and you knew that everything had been done; then you could appreciate the quiet efficiency of so vital a thing as the Hospital Signalling System. Its aid made you ask, perhaps the name and you may always remember that the Bryant Silent Call Hospital Signal System helped.

The function of any hospital signalling system is to enable a patient to summon a nurse and for a nurse to call a doctor.

If the system operates silently it is more desirable than one which depends upon noise to attract attention. Positive operation, simplicity, low cost, and low maintenance charges, are obvious advantages.

The Bryant System is complete in itself. It is connected to the regular electric service supply. There are no other parts: no motor-generators, transformers or batteries.

Because of its simplicity the cost of installation is low in comparison with the more complicated systems using an auxiliary apparatus.

The maintenance charges are limited to the cost of the very small amount of current used by the signal lamps.

This system, has been installed in over five hundred hospitals and more than nineteen thousand stations are in operation.

The Bryant Silent Call Hospital Signalling System embraces every refinement, convenience and advantage.

It is suited to large or small hospitals and is so flexible that it will adapt itself to any hospital need.

PERKINS SUPERIOR WIRING DEVICES

Write for our Hospital Bulletin

BRYANT SUPERIOR WIRING DEVICES

THE BRYANT ELECTRIC COMPANY

1421 STATE STREET, BRIDGEPORT, CONN.

NEW YORK *342 Madison Ave.* CHICAGO *884 West Adams St.* SAN FRANCISCO *149 New Montgomery St.*

The largest plant in the world devoted exclusively to the manufacture of Electric Wiring Devices

For complete index of advertisements refer to the Classified Directory

Is Your Hospital *truly modern?*

THE very bulwark of every successful hospital is scrupulous cleanliness. By that we mean **real,** not merely apparent cleanliness.

The hospital whose corridors, operating rooms, patient rooms, and lavatories are **obviously** dirty may not recognize the importance of what we say here.

It is to the progressive hospital, **knowing** the value of scrupulous cleanliness, but using antiquated, ineffective cleaning methods to obtain it, that this message is directed.

The FINNELL electrical **all-in-one** scrubbing, waxing and polishing machine does not swab dirt with dirt. With powerful, pressure-exerting brushes it loosens every embedded particle—from cracks as well as on the surface. Dirt hasn't the ghost of a chance to survive.

Then, after scrubbing, the same FINNELL can be adjusted to wax and polish where needed. Floors are not only clean, but beautiful. The FINNELL is almost noiseless and operates with surprising ease. It cleans twice the space with half the usual time or labor cost. It is not only a modern hospital necessity but a genuine economy!



No hospital can truly call itself **modern** without a FINNELL. Write for important booklet "Your Questions Answered by Users."

Finnell System, Inc.
35 N. Collier St.
HANNIBAL, MO.

District Offices in Principal Cities
Power Scrubbing Headquarters for 21 Years
Factories—
Hannibal, Mo., and Ottawa, Canada.

FINNELL
ELECTRIC FLOOR MACHINE
It Waxes—It Polishes—It Sands—It Scrubs

Booth 136
Hospital Clinical Congress of North America
Milwaukee, Wis.
June 20th to 24th

switch both hands are instantly again returned to zero.

Although all clock movements are normally silent, provision has been made for loud ticking of the seconds beat clock mechanism to meet certain conditions where sounding rather than observance of the seconds beat is desired. Provision is also made whereby each fifteen seconds interval is identified by a buzzer signal. All of the conditions of loud ticking or periodical signalling are under the control of the operator.

Four switches for controlling the loud ticking, periodical signalling and also for controlling the starting, stopping and returning to zero of the hands of the seconds beat dial, are conveniently located on the front of the clock case, just below the lower dial. The left hand switch controls the operation of the fifteen seconds buzzer; the next switch to the right controls the operation of the audible seconds beat mechanism; the next switch to the right resets the hands of the seconds beat clock from any position on the dial to zero; and the right hand switch serves to cut out the impulses that control the movements of the hands of the seconds beat dial.

The clock is of the flush type, and a suitable wall box is furnished with each clock in which the complete assembly is housed. The door of the wall box has two eight-inch glazed openings and the clock assemblies are so mounted on the door of the flush-type steel cabinets that the clock dials are shown in the glazed openings, and the appearance is that of two regular flush-mounted secondary clocks, mounted in a unit case of white enamel and nickel trim.

The secondary clock mechanisms controlling the movements of the hands of each dial are of the silent movement type, and are normally free from either the minute or second "click" inherent in other clocks, each of which is objectionable for hospital service.

Operating room clocks are used in several different departments of hospitals (usually one clock for each surgical, obstetrical or anesthetic room) and their operation is automatically controlled from a centrally located master clock which may also control other time system equipment, such as time stamps, secondary clocks and in-and-out recorders, and they are therefore free from the need of manual attention in connection with regulation or setting.

The master clock is equipped both with a minute impulse contact which energizes the minute impulse circuits and a seconds beat contact which energizes the seconds impulse circuits.

What Relay Equipment Includes

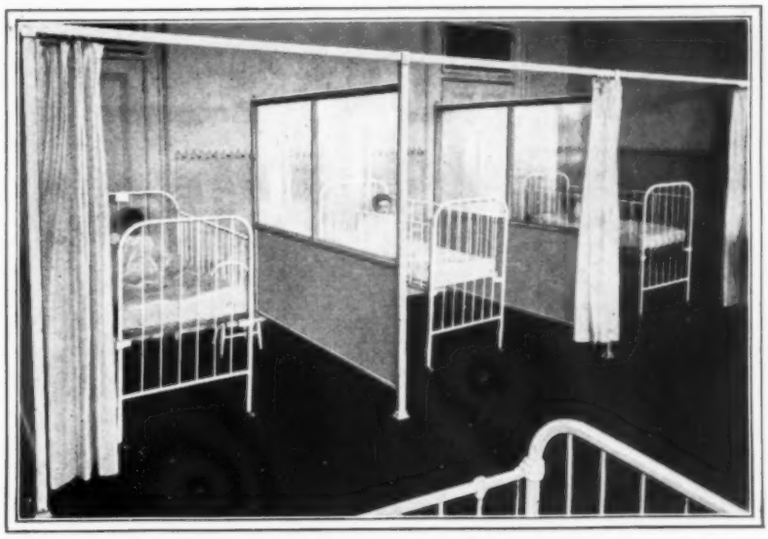
The relay equipment required for operating room clocks includes a relay (or relays) for closing the minute impulse circuit to which the upper movements of the clock are connected, and also a relay (or relays) for closing the seconds impulse circuit to which the lower movements of the clocks are connected. The seconds impulse relay is a standard relay and is contained in the regular control cabinet with all other control apparatus.

The secondary movements that control the operation of the hands of the seconds beat dials, when included in a single circuit, are operated from one seconds impulse relay, which is automatically energized when the first seconds impulse dial is put into service, and will continue to function as long as one or more of the dials are being used. When the last seconds impulse dial is stopped the seconds impulse relay is automatically cut out, thus minimizing mechanical wear of relay.

The minimum size of battery that should be used with a time system equipment, which includes operating room clocks, is 24 volts, 16 ampere hours.

In order that the clock can serve and be operated most

WEISTEEL
TRADE MARK REGISTERED



Children's Ward, Lebanon Hospital, New York City

They Want Semi-Private Wards

PATIENTS in the "between-type group"—or medium income class cannot afford the luxury of private rooms; they can afford more than general ward comfort.

A great many hospitals all over the United States have solved this problem by installing Weisteel Cubicles which provide semi-private wards to this great class of patients who gladly pay the difference over open-ward accommodations.

Weisteel Cubicles are installed at small cost, without in any way disturbing the general hospital routine during installation. The result is always better service to patients and increased revenue for the hospital.

Weisteel Cubicle Advantages:

1. Alleviation of cross infection.
2. Permit greater classification.
3. Segregation according to condition and ailment.
4. Cross ventilation without noticeable draft.
5. Reduction of nurse's travel.
6. Greater privacy and increased quiet.
7. Patients do not face the daylight.

WEISTEEL
TRADE MARK REGISTERED
HOSPITAL CUBICLES

Toilet and Shower Compartments

Dressing Room Partitions

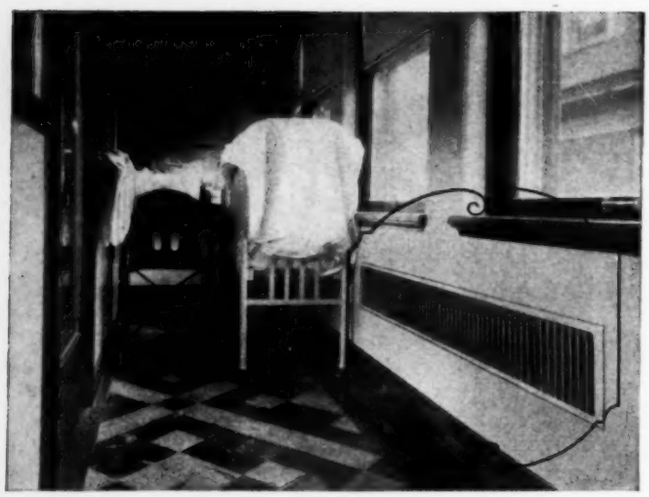
Hospital Cubicles

HENRY WEIS MANUFACTURING CO., INC.
Elkhart, Indiana (Formerly Atchison, Kansas)

Branch Offices:
NEW YORK CHICAGO LOS ANGELES
BOSTON ATLANTA

Representatives in all Principal Cities
Established 1876

For complete index of advertisements refer to the Classified Directory



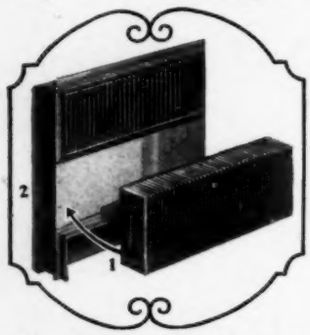
Incubator room—Woman's Hospital—Cleveland, Ohio, showing how extra space was utilized by installing the Herman Nelson Invisible Radiator.

SPACE—where space is needed

The Herman Nelson Invisible Radiator makes every inch of floor and wall space usable. Placed *in* the wall, out of sight and out of mind, it permits free passage in narrow corridors, an extra bed in most wards, and more practical arrangement of furniture and equipment.

Invisible—not camouflaged—it provides all the convenience of radiator heat without the inconvenience of the exposed radiator. No hot pipes to come in contact with. No valves to turn. No noise.

Leak-proof and rust-proof, the Herman Nelson Invisible Radiator is indestructible in service. It is modern equipment for the modern hospital. Mail the coupon for complete information.



Radiator (1) comes installed in a steel case (2) more substantial than the wall itself. The complete unit is ready to install in any 4-inch wall or partition.

THE HERMAN NELSON CORPORATION, MOLINE, ILL.
Builders of Successful Heating and Ventilating Equipment for 20 Years



FREE *This interesting book of facts on The Herman Nelson Invisible Radiator.*

THE HERMAN NELSON CORPORATION
Moline, Illinois

Please send me your illustrated book No. 40
I am planning to build a house containing ..... rooms.

Name .....

Address .....

.....

Sales and Service

BELFAST, ME.	PITTSBURGH	CHICAGO	KANSAS CITY
BOSTON	CHARLOTTE, N.C.	DES MOINES	DENVER
NEW HAVEN	GRAND RAPIDS	MILWAUKEE	SALT LAKE CITY
NEW YORK CITY	DETROIT	MINNEAPOLIS	SPOKANE
UTICA	CLEVELAND	ST. LOUIS	PORTLAND
BUFFALO	COLUMBUS	SAN FRANCISCO	SEATTLE
PHILADELPHIA	TOLEDO	EMPORIA	VANCOUVER
SCRANTON	INDIANAPOLIS		TORONTO

HERMAN NELSON *Invisible* RADIATOR

TRADE MARK

With the Wedge Core

INDESTRUCTIBLE

TRADE MARK

advantageously the wall box should be mounted with the bottom about five feet from the floor.

To make installation of these clocks it is necessary only to connect the wires of the secondary circuits, terminating in the wall boxes, to the plainly labeled terminals of the clock assembly. All other connections are made before the clocks leave the factory.

In addition to the accuracy and reliability of the clock these four features stand out prominently:

1. Silent operation which is accomplished through the use of non-polarized silent secondary movements.
2. Reset of both hands of seconds beat dial to zero by a single movement of a conveniently located switch. Thus positions of hands will always indicate complete elapsed time since the timing operation will always start with zero.
3. Seconds beats are indicated either audibly or silently at the option of the operator.
4. A buzzer located in the clock case is available to indicate distinctly fifteen second periods of time, although this may be silenced through the use of a control switch, if no such indications are required.

Suggested specifications for operation room clocks for hospitals are:

Each clock shall include two eight-inch dials, one of which will show the time of day and the other will show seconds and minutes of elapsed time, beginning with zero.

Each clock is to be operated from the secondary circuits of an electrically operated time system and all movements must be constructed so as to be permanently silent in operation. No pads or other temporary means of silencing will be permitted.

On the front and at the bottom of each clock case will be four switches which control the operations of the following features in connection with the seconds impulse dial: No. 1 enables the operator to start and stop the hands at will; No. 2 resets both the second and minute hand from any position on the dial to zero; No. 3 controls the second ticking mechanism which clearly identifies each second with a distinct metallic click; No. 4 controls the operation of silencing of a signal buzzer, located within the clock case, which identifies with a 1-second buzz the conclusion of each fifteen second interval.

While the movements that operate the hands of seconds impulse dials are controlled through a separate relay, the movements of the minute impulse dials must be designed for operation on the same minute impulse circuits with regular secondary wall clocks, employees' in-and-out recorders and time stamps.

Clocks shall be housed in white enameled cases suitable for flush mounting, and movements and dials are to be mounted on the doors of the clock cases, so that when the doors are opened all parts are easily accessible.

The relay that controls the seconds impulse dials must remain idle except when one or more of the seconds impulse dials are in service. When the first seconds impulse dial is put into service the relay will be automatically energized and will continue to function as long as one or more of the dials are being used, and when the last seconds impulse dial is stopped, the functioning of the relay is to cease automatically.

A NEW SOURCE OF REVENUE

A hospital in Ohio has devised a rather unusual method of obtaining a little revenue from the city. Through an agreement with the mayor, the hospital receives the fees derived from the marriages that are performed in the office of the mayor. Last year the sum of sixty-two dollars was obtained from this source.

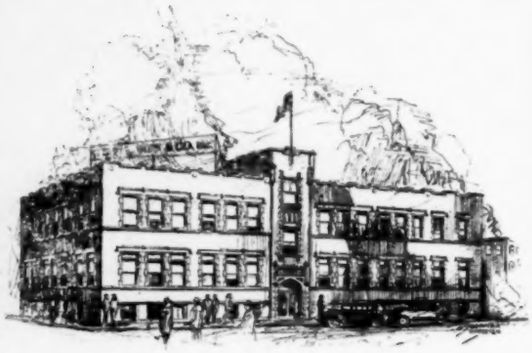
"Clinical Photography"

An elementary textbook on this rapidly growing application of photography is just off the press. Within the compass of its 60 pages practically every fundamental of clinical picture recording is treated. It is simply written, profusely illustrated and should be in the hands of every clinician, department head and hospital superintendent. A copy will be sent you on request. Write us now.

No hospital is completely equipped which lacks adequate photographic equipment. Ask your Eastman Demonstrator why.

Eastman Kodak Company

Medical Division Rochester, N. Y.



The FISCHER *Permanent* Exhibit

WITH the opening of the new Fischer Administration Building, shown above, the Fischer Company has inaugurated a new permanent exhibit. In the demonstration rooms of this new building, individual Diathermy, Wave Generator, Quartz Light and Radiant Lamp apparatus will be demonstrated and explained to interested hospital executives and physicians, on appointment, every day in the year. Arrangements may be made for special instruction or for clinical work, without charge or obligation. Experienced physicians and technical men will place their time at the disposal of any hospital executive, equipment committee or physician interested in the application of this new branch of medical science to hospital conditions.

Hospital executives and physicians are cordially invited to visit and use this Fischer Permanent Exhibit at such times and in such manner as are most advantageous to them.

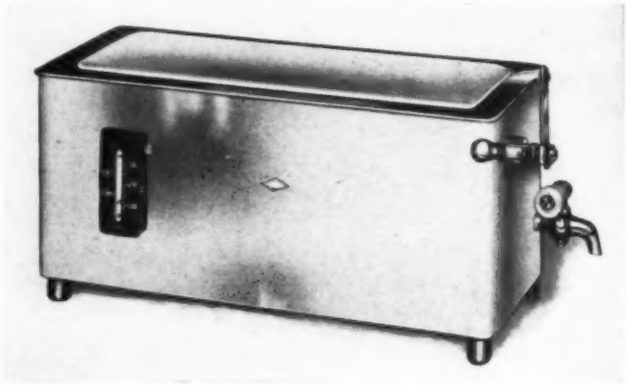
H. G. Fischer & Co., Inc.
"Physical Therapy Headquarters"
2323-2337 Wabansia Ave.
CHICAGO, ILL.

TWO NEW INSTRUMENT STERILIZERS

Two new instrument sterilizers have just been placed on the market. One is a hot oil sterilizer for cutting instruments and the other a bronchoscope sterilizer for long instruments.

The hot oil sterilizer has been designed for the sterilizing of knives, scissors and other sharp-edged instruments to prevent injury to the cutting surfaces and prevent corrosion. The temperature required for oil sterilization is 300 degrees F., and the sterilizer has an automatic temperature control that regulates the temperature accurately between 300 and 305 degrees F., by turning the electric heating current on and off.

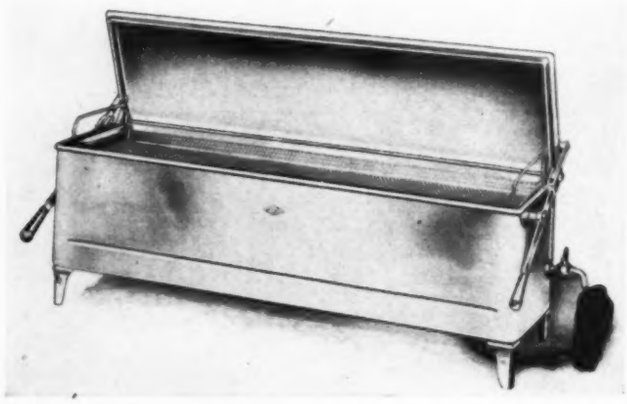
The cover and tray are raised and lowered simultaneously by means of a single lever, so that the instruments



Hot oil sterilizer

may be exposed and drained by merely tilting the lever with the elbow. The sterilizer is of solid brass casting without seams or solder. The thermometer on the side of the sterilizer indicates the temperature of the oil. Heavy mineral oil may be used without a disagreeable odor escaping, provided that the cover is kept closed. Two or three quarts of heavy mineral oil are all that is required over a long period.

When the current has been turned on and the thermom-



The bronchoscope sterilizer

eter registers 300 degrees F. the instruments should be placed in the tray after which the cover and tray are lowered.

After the instruments have remained in the sterilizer thirty minutes the tray should be elevated and the instruments allowed to drain.

Boiling water is the medium used in the sterilizer for long instruments. The cover and tray are lifted and low-

The DUNHAM

REG. U.S. PAT. OFF.

Difr~enshal~Vacm Heating System.

A FIXED DIFFERENTIAL IN PRESSURE — A VARIABLE DEGREE OF VACUUM

Insures Even Temperatures

The Dunham Differential Vacuum Heating System insures remarkably even indoor temperatures no matter what the weather outdoors may be. When the weather is cold during the midwinter, this system operates with steam temperatures in the radiators as high as 220 degrees, and with a boiler pressure of 2 to 3 pounds. In the milder weather of spring and fall radiators operate efficiently and sufficiently with steam at temperatures as low as 133 degrees, and with boiler pressure as low as 19 inches of vacuum. Overheating is effectively prevented. A complete adequacy of heat in severe weather does away with any possibility of underheating. The result is a smooth and remarkably even temperature record in all weathers.

Naturally, such a heating system saves fuel. May we tell you more about the economy record of the Dunham Differential Vacuum Heating System? Ask for Bulletin "H."

C. A. DUNHAM CO.
DUNHAM BUILDING
450 East Ohio Street, Chicago

Over sixty branch and local sales offices in the United States and Canada bring Dunham Heating Service as close to you as your telephone. Consult your telephone directory for the address of our office in your city.

YOUNG
CENTRIFUGAL VACUUM AND BOILER FEED
PUMPS

Worth While Fuel Savings

In your hospital Young Centrifugal Vacuum and Boiler Feed Pumps will effect worth while fuel savings through their high efficiency in keeping radiators and piping free from air and water, and in enabling the system to be operated under higher vacuums than is customary. The vacuum producing element of Young Pumps is designed to insure a powerful suction on the return piping at all times. With the reduction in boiler pressure when Young Pumps are installed there comes a saving in fuel, and, as stated this fuel economy is well worth while.

Why not secure our Young Pump Bulletin "MH?"

YOUNG PUMP COMPANY
DUNHAM BUILDING
450 East Ohio Street, Chicago
In Canada: C. A. Dunham Co., Ltd., Toronto.

Are You Boarding Moths this Summer?



PERHAPS you will be if you don't prepare for them. But we know hundreds of leading hospitals that won't for they have already ordered their season's stock of Puritox—the guaranteed moth killer.

Puritox is a solidified gas in crystal form. Placed among blankets or clothing the gas is freed and completely fills the closet or container, positively killing all moths and preventing egg development. It's simple and easy to use and will not stain or discolor any material.

Puritox, made by the Chamberlain Haber Chemical Company, of Cleveland, has been sold to hospitals for almost thirty years. It's one of our many sanitary chemical products and cleaning compounds, sold at special hospital prices.

The Chamberlain-Haber Chemical Company
CLEVELAND



This coupon brings testing samples and special catalog.

Check the samples you want
- ☐ Puritox Moth Killer
- ☐ Presto Bowl Cleaner
- ☐ Presto Pipe Opener
- ☐ Presto Tile & Porcelain Cleaner
- ☐ Nip-On Roach Killer

THE CHAMBERLAIN-HABER CHEMICAL CO., *Cleveland, Ohio*

Gentlemen:
Without obligation send samples of the items checked together with your catalog containing hospital prices.

Hospital .....
Attention of .....
Address .....
City ..... *State* .....

For complete index of advertisements refer to the Classified Directory

THORNER'S
Silver Service



Thorner's Silver Service is made of 18% Nickel Silver with a quadruple silver plate. Wears a lifetime. Replacement through breakage is forever eliminated. It is never affected by wear or polishing.

Illustration features Thorner's Improved Three Compartment Hot Water Plate. Tea Set with reinforced bands, hard metal hinges, Silver Soldered and one-piece unleakable bottom. Covered Soup Cup with Silver Soldered handles. Sherbet Dish, Individual Bud Vase, Salt and Pepper Shakers, and Superior Grade Sectional Plate Flatware.

Visit our exhibit at the Catholic Hospital Association Convention. June 20 to 24, at Milwaukee, Wis., Booth 13.

THORNER BROTHERS

Importers and Manufacturers of Hospital and Surgical Supplies

386-390 Second Avenue
NEW YORK CITY

ered by means of levers at the ends which act simultaneously. When the cover is lowered the instruments are immersed in the boiling water and when it is elevated they drain in the raised tray.

The sterilizer has a cast brass bottom to which the heating elements are attached. An even temperature is maintained by means of an automatic control regulated by turning the current on and off.

A NEW MORTUARY ELEVATOR

It is sometimes necessary to place a hospital mortuary in a basement, or sub-basement, when room above ground is at a premium.

There has been devised by an eastern machine company a lift, operated by an endless hand rope. The overhead machine is equipped with spur gearing, making it possible to raise comparatively heavy loads with a reasonable amount of effort. A hand operated brake is supplied, to allow the platform to be stopped at any point desired. When lowering bodies, the brake is released, and the platform descends by gravity, the speed being regulated by pressure on the brake rope, the final downward pull locking the brake and holding the platform at the lower floor level.

The advantage of this outfit seems to lie in its inexpensiveness, as compared with an electric elevator; its ease of operation, and its low upkeep cost.

It would appear that such an outfit, when installed in a hospital in which it is necessary to lower bodies to a mortuary below ground level, would be both practicable and efficient.

OPERATING TABLE ATTACHMENT FOR HOLDING PATIENTS

An attachment for holding patients in a side position on the operating table and for holding in position during the amputation of the legs has been devised. The attachment, shown here, prevents the anesthetized patient from rolling too far in either direction and prevents the arm and shoulder that are uppermost from compressing the tissues of the neck and hindering chest movement. The patient

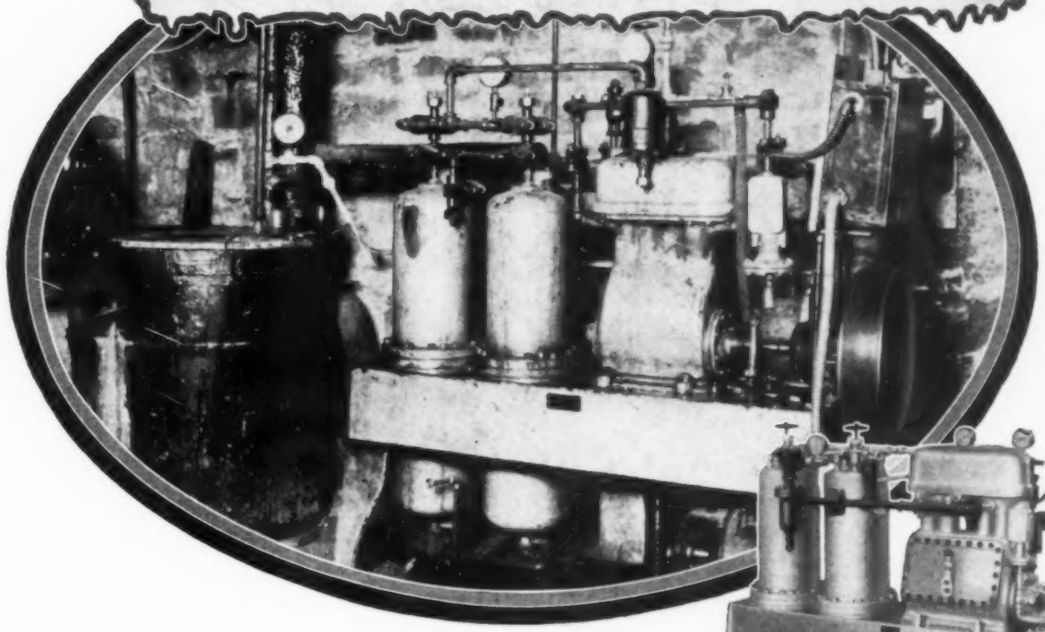


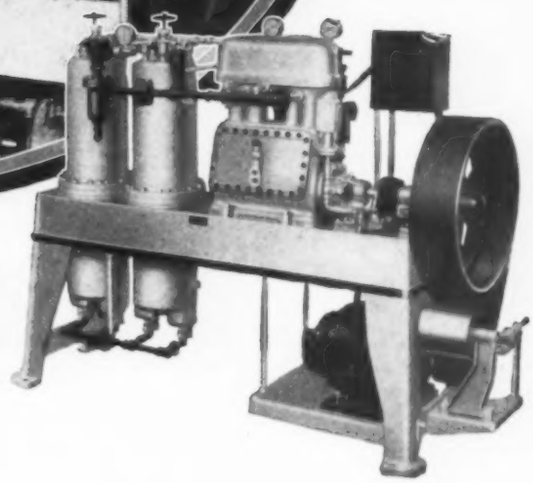
may thus be placed in the desired position before being anesthetized, obviating awkward lifting during the procedure.

In leg amputations the patient is anesthetized and the

Lipman

AUTOMATIC REFRIGERATION





Still Going Strong!

Installed in the Colorado Sanitarium, Boulder, Colorado, in 1921, this Lipman Model 1000 is still going strong and is good for years to come.

Such service is possible only because of the superior construction of Lipman Machines. Made of high-grade materials, machined and assembled by master mechanics, tested long and thoroughly, they are bound to hold up over the years and give good service with a minimum of repairs.

Write today for facts, full information, about Lipman Full-Automatic Refrigeration.

The Lipman Model 1000 is an excellent and popular model for hospitals, sanitariums and public buildings of all kinds. It gives dependable, trouble-free service, quietly, cleanly, safely and economically. Lipman Refrigeration costs much less than to cool with ice.

GENERAL REFRIGERATION COMPANY

117-193 **Shirland Ave., Beloit, Wisconsin, U.S.A.**

Please send me full particulars including Free Descriptive literature on Lipman Refrigerating Machines.

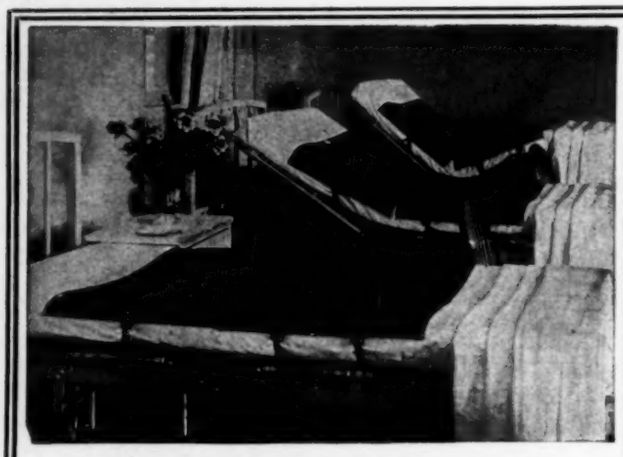
Name..... St.....

City..... State.....

THE DRY, CONSTANT COLD OF THE MOUNTAIN TOP

GR CO

For complete index of advertisements refer to the Classified Directory



NORINKLE RUBBER SHEETS

Mt. Sinai Hospital, N. Y. City (Dr. S. S. Goldwater, Director), have been using NORINKLE RUBBER SHEETS *exclusively* since 1922.

Extract of Letter just received from Miss Muriel Anscombe, Jewish Hospital, St. Louis, Mo.

"Of the 14 departments in the house that are using your NORINKLE RUBBER SHEETS, there is not one head nurse who does not feel that the new type of NORINKLE RUBBER SHEET is superior to any other used.

"I did not receive one adverse criticism."

HENRY L. KAUFMANN & CO.

301 Congress Street **Boston, Mass.**



THE HANOVER GENERAL HOSPITAL, HANOVER, PA
Constructed by The Ballinger Co., Phila.

A Personal Message:

(W. F. Dougherty, Jr., President, speaking)

"Every successful business owes its Prosperity to the Quality and Variety of Service. This Organization is no exception and so well have we looked after the interests of our customers that the name DOUGHERTY is known for Reliability from Maine to California and from Canada to Florida."

W. F. DOUGHERTY & SONS, INC.
1009 ARCH STREET, PHILADELPHIA, PA.

Branch: 914 Atlantic Ave., Atlantic City, N. J.

The structure pictured in this copy is Kitcheneered by Dougherty

leg is held aloft while the surgical preparation of the skin is in process. The support is fastened to the side rail of the table and the shell, held at any angle desired, is brought into position under the leg near the site of operation.

The advantages gained in using the device in such operations are greater steadiness of the leg while the bone is being sawed off and the holding of the stump upward at any angle desired by the surgeon for the fashioning of the plastic flaps.

The manipulation of the device is simple. The accompanying picture shows the patient in the side position with the device held in place by a clamp fastened to the side rail of the table. The height is adjusted to suit the breadth of the patient's shoulder by the screw projecting from the side of the clamp. The shell-shaped limb supporting member is adjusted to the limb and held in position on the horizontal rod by means of a clamp fastened by a single screw. The upper part of this clamp forms a universal joint that allows the shell-shaped portion of the support to be set at any angle. The advantages of such arrangement are obvious. Since the picture shown was taken, a hand supporting member has been added to the device to replace the makeshift.

A GAUZE REEL FOR DRESSINGS

To insure the perfect winding of gauze a reel has been devised on which the gauze is wound. The reel is mounted on a rack of convenient size for use in the dressing rooms. The gauze is wound to overcome all slack and so that there are no uneven edges or wrinkles when the gauze is folded for a dressing.

The reels are furnished in a variety of stocks and sizes available in an eight ply—four and one-half inch



width of one hundred yards and a four ply—four and one-half inch width of two hundred yards. A four ply—nine-inch width is supplied on special order. A sample reel and a rack or holder for the reel are furnished gratis to hospitals.

And when the job is done?

EVEN if the operation were successful in every particular—the incision clean—the conditions favorable—all your faculties co-ordinating with swift assurance—*are you satisfied with the ligatures you used?* Have you faith in materials equal to the faith you have in your assistants?

For a third of a century Armour Laboratory has been collaborating with the medical profession to justify its faith in the materials it produces. It is only reasonable that results have merited the approval of hospitals throughout the world! Armour Laboratory has at its command vast supplies of fresh materials from which to experiment and manufacture organotherapeutic products. Extraordinary care and skill go into the production, for instance, of ligatures. We will be very glad to send you samples. They may be used with utmost confidence. The same applies to pituitary liquid.

Where the Armour label appears on medical supplies, you may be sure it is the best that can be produced of its kind. The tremendous demands of modern medical practice make it imperative for us to keep strides with the demand both for quantity and excellence. This is why Armour Laboratory is recognized as "headquarters for medical supplies of animal origin."

ARMOUR AND COMPANY *Chicago*

PHARMACEUTICAL PRODUCTS

Try This



See the "Double Sheet" Increase Absorption

Water dropped on a Dubltowl spreads five times faster than on a single sheet of the same material. That's the vital reason why Dubltowls dry quicker. And the double feature stops waste. One Dubltowl wipes both hands dry. Fewer towels are needed, costs are reduced.

Dubltowls are strong and lintless. Made from genuine all-kraft stock. Sanitary. Soft on face and hands. Acceptable to the most particular. Use them in the general lavatories for economy. Dispensed from neat Dubltowl cabinet illustrated or your own standard equipment. Size of sheet 10¾ x 10 in. 150 Dubltowls (300 sheets) per pkg. Write for prices, samples and name of nearest jobber.

Request on your letterhead will bring a Bay West Wash-Up Kit — a novel combination of Dubltowls and soap sheets. Fits the door pocket of your auto.

Bay West Paper Company
Green Bay, Wis.

BAY WEST DUBLTOWLS

"ONE DUBLTOWL WIPES DRY-YOU TRY IT"

NEWS OF THE HOSPITALS

Alabama

Construction of the annex to the Hillman Hospital, Birmingham, at an approximate cost of $450,000 and providing 200 additional beds, is expected to begin in the near future.

Arkansas

The corner stone was laid recently for the new St. Joseph's Sanitarium, Hot Springs.

California

A gift of $50,000 toward the $150,000 Pomona Valley building fund for a new hospital to be started this year featuring service to women, was announced recently.

Connecticut

The new nurses' home of the St. Mary Hospital, Waterbury, was recently opened.

Delaware

Dedication of the Natalie Townsend Shaw addition to the Beebe Hospital, Lewes, brought the capacity of this hospital to sixty beds.

Florida

A complete roentgen-ray department was recently given to Sarasota Hospital, Sarasota, by Dr. Joseph Halton, Sarasota, and Honore and Potter Palmer, Chicago.

The William Deering Ward of Jackson Memorial Hospital, Miami, will be maintained by the interest from a bequest of $500,000 from the estate of Mr. Deering.

Plans have been accepted for the proposed Scenic Highlands Hospital and Sanitarium to be constructed at Winterhaven, funds for which are being raised by a campaign.

A two million dollar hospital is being erected on a built-up island at Miami Beach, Fla., by James A. Allison, Indianapolis, Ind.

Illinois

A bequest of $340,000 to Wesley Memorial Hospital, Chicago, to complete a gift of $500,000 was disclosed in the will of the late Charles Deering, of Miami, Florida.

Construction of the new Elizabeth Condell Hospital, Libertyville, was recently started.

Kentucky

A $100,000 wing will be added to the Good Samaritan Hospital, Lexington, providing thirty-five additional beds.

Louisiana

A fifty-bed addition to the New Orleans Home for Incurables, to be known as the Elsie Dielman Behring Memorial Wing for Epileptics, is expected to be opened soon.

VITA glass *transmits* ultra violet rays

VITA glass is a true, clear glass, in appearance like window glass. It differs from window glass in the fact that it transmits the vital ultra violet irradiation which window glass absorbs.

VITA glass, the discovery of Prof. F. E. Lamplough, M.A. Cambridge, of England, is thus an invention of far-reaching consequence to heliotherapy and general health. In addition VITA glass is inexpensive and is coming into general use in hospitals, schools and homes.

It has already been installed or ordered by an impressive list of hospitals and public institutions.

Why not make your windows avenues of sun-health? Let us tell you the details of VITA glass.

VITAGLASS CORPORATION

50 East 42nd Street New York, N. Y.

GALL BLADDER SHADOWS

Cholecystography by the Graham Method with

IODEIKON

(Tetra-iod-phenolphthalein Sodium Salt—N. N. R.)



Purified, standardized and clinically tested for both the oral and intravenous methods

in collaboration with the originators

of this X-Ray method of gall bladder diagnosis.

Exceptionally high iodine content, producing dense shadows with normal dosage.

Far lower limits of alkalinity than required for intravenous administration and absence of free acid which would render it inoperative for oral use.

25 and 100 gram bottles and boxes of five 3½ gram single dose ampoules. At all dealers.

Mallinckrodt Chemical Works

St. Louis Montreal Philadelphia New York

Literature on request to X-Ray Dept., St. Louis

For complete index of advertisements refer to the Classified Directory



Book Reviews and Current Hospital Literature

CLINICS, HOSPITALS AND HEALTH CENTRES

By MICHAEL M. DAVIS, Ph.D., Executive Secretary, Committee on Dispensary Development, United Hospital Fund, New York.[1]

The hospital field is to be congratulated on the appearance of this book by Mr. Davis. Hospital administration as it is understood today is a relatively new profession, and the physician or layman desiring to enter that field finds himself confronted with a minimum of textbooks on this subject and its allied interests.

This volume is complete and offers to the seeker of information on clinics and dispensaries a treatise complete and up-to-date, based upon the experience of the hospital field as a whole, but particularly on the experience of Mr. Davis through years of intensive study of this subject. It is not a book that one can treat lightly in reading. While not technical, the book is in every sense complete, and hospital administrators will find the solution of many of their clinical and dispensary problems in this volume. To those who are contemplating the establishment of a dispensary, it is to be commended; to those who already have existing dispensaries, many of their shortcomings and deficiencies will be revealed and a criticism offered that is more constructive than destructive.

The final chapter on hospital clinics follows most logically and conclusively the main body of the book, which from its opening chapter on the origin of clinics carries one through almost every stage of dispensary development and organization.

It is without question a book that should be in the library of every hospital, regardless of whether or not that hospital supports a dispensary and the writer is to be congratulated on this exceedingly timely, complete addition to the literature on hospital administration.

WHAT CONSTITUTES ADEQUATE MEDICAL SERVICE?

By SAMUEL BRADBURY, M.D., Chief of Clinic, Medical Department, Cornell University Medical College. New York.[2]

Within late years, realization of the economic loss caused by the degenerative and permanently disabling diseases has directed attention to their possible discovery in the earlier and more easily treated stages. As a matter of fact, the situations presented by the average patient in the medical department of a clinic are frequently more obscure and difficult to interpret than those of the usual hospital case. Private medical practice, as well as medical service in clinics, faces the inherent difficulty of these cases not only in respect to diagnosis but in the accomplishment

[1] Harper and Brothers, New York.
[2] Committee on Dispensary Development of the United Hospital Fund New York.

EATON ALL-WOOL BLANKETS

—withstand hard wear and constant use

THE Eaton is essentially a hospital blanket manufactured upon definite specifications, the direct result of a long series of scientific tests under actual hospital conditions. EATON BLANKETS are standard equipment in hundreds of hospitals thruout the country. The mills where EATON BLANKETS are made have been operated continuously for 90 years.

EATON BLANKETS are made in mills out away from the crowded city where pure air circulating thru every department makes blankets more wholesome, more sanitary and more desirable for hospital use.

Any superintendent or purchasing agent for any hospital where EATON BLANKETS are not already in use is at liberty to send for samples of any style.

This trial order will be filled at our regular quantity price and may be returned for full credit.

Try an EATON BLANKET and be convinced.

STYLES

1001 Brown Heather	301 Blue
2001 Blue Heather	302 Rose
	303 Tan
3001 Natural Gray	304 Lavender

Ask for information regarding materials for Occupational Therapy

HORNER BROTHERS WOOLEN MILLS

Founded 1836

EATON RAPIDS **MICHIGAN**

TO THE TUBES *WITH THE LAUNDRY!*

Avoid "Traffic" Congestions. Install a Pfaudler Glass-Lined Laundry Chute.

NEW YORK CITY'S traffic jam around rush hour is too crushing to be comfortable. Crowding, pushing, (cursing) are familiar attributes of the frenzied mob trying to get home. Without its subways, traffic would be well nigh impossible to handle.

BUT as the "tubes" are vital to New York so is a Pfaudler Glass-Lined Laundry Chute vital to the modern hotel or hospital. The disposal of soiled linen at a certain period of the day literally creates a "traffic jam" on the elevator. This means delay and unnecessary exposure to germ covered linen.

ELIMINATE THIS in the interest of health and efficiency! Make the Pfaudler glass-lined laundry chute the tube of your laundry disposal system. There is none which is faster, more sanitary or simpler. To the tubes with the laundry!

THE PFAUDLER CO.
Laundry Chute Division
ROCHESTER, N. Y.





100% is to bran what U. S. P. is to drugs

KELLOGG'S ALL-BRAN conforms to the dictates of established medical practice by providing "roughage" or "bulk" in a known, definite amount. In cases where bran is indicated in the diet, ALL-BRAN may be prescribed with full confidence that the definite results anticipated will be accomplished. For ALL-BRAN is 100% bran—100% effective.

Part-bran products may be 50% bran or 25% bran—or more or less. There is no accurate standard for gauging their bran content, and consequently their efficacy.

Cooked and krumbled by a special process, ALL-BRAN is a prescription patients like to take. Ready to eat. It is delicious with milk or cream. With fruits or honey added. Or it may be cooked into various breads and appetizing dishes.

Sold by all grocers. Served everywhere. Made by Kellogg in Battle Creek, Michigan.

Kellogg's ALL-BRAN

of treatment up to the point of securing satisfactory results. In contemporary medical schools and in modern literature, emphasis is laid rather on diagnosis than on the details of carrying out treatment, although it is on these details that successful results, from the point of view of the patient, largely depend.

With these points in mind, and with the aim of establishing some standards through which adequate service and the results of clinic care could be judged, a series of two hundred cases of adults from the medical department of the Cornell Clinic, New York, were carefully investigated.

While the study obviously deals with too few cases to yield a statistical conclusion, it is believed that it lays emphasis on two important and somewhat neglected aspects of medical service; namely, the analysis of the aspects of treatment that involve the intelligence and cooperation of the patient, and the formulation of criteria of methods whereby results of treatment can be systematically judged.

The study of this group of rather complex and long term medical cases of adults has brought out strongly the large importance, in successful treatment, of defining and recording the essential medical problem of the patient as well as the diagnosis. The routine notation of a prognosis has been shown to be stimulating to the physician and useful from the standpoint of the patient. An estimate of the illness, which we have called a disability rating, has been found helpful to the physician in making plans and in judging results. Of especial importance has appeared to be the making of a plan of treatment that takes into account both the medical problem and the patient's intelligence, personality, background, and resources. The study has brought out forcibly the uses and value of the medical social worker in helping the physician to define the patient and to carry out this plan of treatment.

The results of this study should be developed by analysis of a larger number of cases and of cases of other medical or surgical types. At a number of points the present study is not conclusive, and it must be regarded as a suggestive contribution to medical practice rather than as a definite account of observations or conclusions. It is hoped that this attempt may stimulate others to make similar investigations of the same problems.

BOOKS RECEIVED

NURSING IN DISEASES OF THE EYE, EAR, NOSE AND THROAT, Manhattan Eye, Ear and Throat Hospital. By Harmon Smith, M.D., Senior Surgeon, Director in Throat Department, Manhattan Eye, Ear and Throat Hospital, New York, and Committee on Nurses. Fourth Edition, illustrated. W. B. Saunders Company, Philadelphia and London, 1927. Price, cloth $2.25 net.

PRACTICAL URINALYSIS FOR NURSES. A short and comprehensive treatise on this subject from the standpoint of the nurse, by E. W. Marquardt, M.D., Ex-intern, German Hospital of Chicago, Attending Surgeon, West Suburban Hospital, Oak Park, Ill. Third revised edition. Chicago Medical Book Company, 1923.

ELEMENTARY BACTERIOLOGY AND PROTOZOOLOGY FOR THE USE OF NURSES. By Herbert Fox, M.D., Director of the William Pepper Laboratory of Clinical Medicine in the University of Pennsylvania; Pathologist to the Zoological Society of Philadelphia. Fourth Edition, Thoroughly Revised. Illustrated with 67 Engravings and Seven Colored Plates. Lea & Febiger, Philadelphia and New York, 1926. Price $2.50.